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SATISFACTION WITH LEADER BEHAVIOR: A TEST OF SELECTED ASPECTS OF THE PATH-GOAL THEORY OF LEADERSHIP

by

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Satisfaction with Leader Behavior: A Test of Selected Aspects of the Path-Goal Theory of Leadership" submitted by Philip John Creed in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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DEDICATED

TO THE MEMORY OF MY FATHER

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ABSTRACT

The purpose of the study reported in this thesis was to test aspects of the Path-Goal Theory of Leadership in a large urban school system. The predictions made were that occupational level, Role Ambiguity, Role Conflict, Task Structure, Task Repetitiveness and Task Autonomy would be associated with moderation of the relationships between leader behaviors and the satisfaction of subordinates. Data were collected from personnel including assistant superintendents, directors, supervisors, psychologists, reading specialists, speech therapists, social workers and junior clerical personnel with a variety of job titles.

Factor analysis of the responses to the Leader Behavior Questionnaire produced three factors labelled (1) Leader Participative Behavior, (2) Leader Achievement-Oriented Behavior and (3) Leader Directive Behavior. Leader Participative Behavior was positively correlated with the Extrinsic Satisfaction of subordinates, irrespective of their role perceptions or task characteristics. However, differences in relationships between Leader Participative Behavior and the Intrinsic Satisfaction of subordinates were associated with Role Conflict, Task Structure and Task Repetitiveness. Leader Achievement-Oriented Behavior was positively correlated with the Extrinsic Satisfaction of subordinates, irrespective of their role perceptions and task characteristics. Nevertheless, Role Conflict, Role -

Ambiguity and Task Autonomy were associated with moderation of relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction. Only subordinates with High Task Autonomy were intrinsically satisfied with Leader Achievement-Oriented Behavior. Leader Directive Behavior was negatively correlated with the Intrinsic, Extrinsic and General Satisfaction of subordinates engaged in repetitive tasks, and with the Extrinsic Satisfaction of subordinates in low Task-Autonomy situations. Differences in relationships between leader behaviors and subordinates' satisfaction found at selected occupational levels seemed to be reflected in how members perceive their own roles and tasks.

These findings suggested that differences in relationships between leader behaviors and the satisfaction of subordinates, according to differing perceptions of roles and tasks, are associated with specific kinds of leader behavior. This conclusion is supportive of an essential feature of Path-Goal Theory; that is, leader behavior provides guidance, support and rewards necessary for the satisfaction of subordinates in the work situation. The "moderator variable" methodology implied in the statement of the Path-Goal Theory assisted in interpreting relationships between leader behaviors and the satisfaction of subordinates. The Path-Goal Theory of Leadership was applicable to the selected school system personnel.

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CHAPTER I

INTRODUCTION

The essential features of the study, as it was proposed, are introduced in this chapter. The sections in the chapter outline the purpose of the study, indicate the justification for extending knowledge in this area of educational administration, state the limitations and delimitations of the study and define the basic concepts employed in the study. The concluding section contains a guide to the organization of the thesis.

PURPOSE OF THE STUDY

A basic proposition of the Path-Goal Theory of Leadership, according to House and Dessler (1974:30), is that:

> one of the strategic functions of the leader is to enhance the psychological states of subordinates that result in motivation to perform or in satisfaction with the job.

Other strategic functions of the formal leader in an organization were listed by House and Mitchell (1974:84) as follows:

> 1) recognizing and/or arousing subordinates' needs for outcomes over which the leader has some control,
> 2) increasing personal pay-offs to subordinates for goal attainment,
> 3) making the path to these pay-offs easier to travel by coaching and direction,
> 4) helping subordinates clarify expectancies,
> 5) reducing frustrating barriers, and
> 6) increasing the opportunities for personal satisfaction contingent on effective performance.

This view of leadership suggests that a designated leader's functions in an organization are complementary to those of his subordinates.

According to House and Dessler (1974:31) and House and Mitchell (1974:85), the motivational functions of the leader, stated less formally, consist of increasing personal pay-offs to subordinates for work goal attainment, and making the path to these pay-offs easier to travel by clarifying it, reducing road blocks and pitfalls, and increasing the opportunities for personal satisfaction en route.

The purpose of this study was to test the applicability of aspects of this proposition in an educational organization.

JUSTIFICATION FOR THE STUDY

The criticisms of leader behavior research advanced by Korman (1966:349-361) as most serious were that the studies failed to take into account situational variables and that they lacked a conceptual base. The development of the Path-Goal Theory of Leadership overcomes these problems. According to House and Mitchell (1974:81-82), the promise of the Path-Goal Theory is that it suggests with some precision the situational factors upon which leader behavior is contingent. Moreover, the path-goal approach has its conceptual base in more general motivational theory known as expectancy theory. Briefly, expectancy theory states that an individual's attitudes and behavior can be predicted from (1) the degree to which the job, or behavior, is seen as leading to various outcomes (expectancy) and (2) the evaluation of these outcomes (valency).

An additional criticism of leader behavior studies made by Barrow (1977:233) was that little could be concluded about process relationships. This criticism was answered by House and Mitchell (1974:94) who stated that the Path-Goal Theory not only suggests the most effective leader behavior in a particular situation, but also attempts to explain why it is most effective.

Studies utilizing the propositions of the Path-Goal Theory of Leadership therefore have the potential for extending knowledge in this aspect of administration by explaining the relationships established in many leader behavior studies and also accounting for situational factors.

Further justification for the study is provided by Miklos (1963:1) who stated that in a time of significant change many new concepts and methods will be introduced and dealt with superficially in research and then passed over in favor of other approaches. The implications for the practice of administration may never be fully developed. These comments seem to summarize the state of research in leader behavior at present. Although the design of this study meant that no conclusions could be drawn about the effects of leader behavior, consideration of the relationships found between leader behavior and the satisfaction of subordinates may result in a reappraisal of common practices in educational administration. By taking into account the situational factors upon which these relationships seemed to be contingent in this study, educational administrators may be guided towards improved administrative practices.

Finally, most leader behavior studies in educational administration have focussed upon school principals and classroom teachers. In contrast, the focus of this study is upon relationships between leader behavior and the satisfaction of central office administrative and clerical personnel, and auxiliary professional personnel. This change of focus makes a contribution towards broadening the perspective on educational administration by acknowledging that central office personnel form an integral part of the whole of the administration of education.

LIMITATIONS AND DELIMITATIONS

This study was delimited in four ways. Initially the study was delimited to three kinds of leader behavior. Secondly, only one of three categories of subordinate attitudes and behavior listed in summary statements of the Path-Goal Theory was investigated. Thirdly, only two among several contingency factors listed were incorporated into the study. Finally, subjects were chosen from one school system.

According to House and Mitchell (1974:84), several kinds of leader behavior exist, not all of which are included in descriptions of the Path-Goal Theory of Leadership. Four kinds of leader behavior which have been incorporated are directive, supportive, achievement-oriented and participative leader behaviors. However, hypotheses developed for testing in this study were delimited to directive, supportive and participative leader behaviors.

Further, the theory is intended to explain the effects of leader behavior on the following attitudes and behavior of subordinates: (1) the satisfaction of subordinates, (2) the subordinates' acceptance of the leader, and (3) the motivational responses of subordinates. This study was delimited to investigating the relationship between leader behavior and subordinate satisfaction only.

Contingency factors which mediate the relationship between leader behavior and the satisfaction of subordinates were classified by House and Mitchell (1974:89) as subordinate characteristics and environmental factors. This study was delimited to the mediating effects of role ambiguity and conflict, and the task characteristics, autonomy, repetitiveness and structure.

The study was further delimited to investigating the applicability of the Path-Goal Theory to selected personnel in one large, urban, Canadian school system. Personnel were categorized as either administrative, professional or clerical.

A major limitation of the study was that data collection was confined to the use of closed, structured questionnaires which comprised items considered appropriate in organizational settings other than educational administration. Furthermore, the contingency variables chosen are few among many which may mediate relationships between leader behavior and the satisfaction of subordinates. In addition, leader behavior is only one among many factors which contribute to subordinate satisfaction.

DEFINITION OF TERMS

Key terms relating to specific leader behaviors, types of satisfaction, perceptions of role and the characteristics of tasks are defined in this section.

Leader Behavior

The definitions of Leader Directive Behavior and Leader Supportive Behavior were adapted from the definitions of leader Initiating Structure and leader Consideration behaviors proposed by Halpin and Winer (1957:42-43). The definition of Leader Participative Behavior was given by House and Dessler (1974:43).

Although Leader Achievement-Oriented Behavior was not included in the research design of this study, a definition of this kind of leader behavior is included here because it was used in data analyses subsequent to the adoption of an oblique factor solution of responses to the

Leader Behavior Questionnaire (see Chapter V). The definition adopted was proposed by House and Mitchell (1974:83).

Leader Directive Behavior. Leader Directive Behavior is behavior related to the definition of relationships or roles and to the establishment of well-defined patterns of organization within a group by the leader.

Leader Supportive Behavior. Leader Supportive Behavior is behavior indicative of friendship, mutual trust, respect, and warmth in relationships with subordinates.

Leader Participative Behavior. Leader Participative Behavior is behavior indicative of the degree to which the leader allows subordinates to influence decisions by asking for suggestions and including subordinates in the decision-making process.

Leader Achievement-Oriented Behavior. Leader Achievement-Oriented Behavior is behavior related to setting challenging goals, expecting subordinates to perform at their highest level, continuously seeking improvement in performance, and showing a high degree of confidence that subordinates will assume responsibility, put forth effort and accomplish challenging goals.

Satisfaction

The definitions of satisfaction are based upon the discussion of the concept by Wanous and Lawler (1972:95-105). The distinction between intrinsic satisfaction and extrinsic satisfaction follows the clarification of the intrinsic-extrinsic dichotomy proposed by Brief and Aldag (1977: 496-500).

The approach to satisfaction adopted in this study is the one distinguished by Wanous and Lawler (1972:97) as the discrepancy between what feelings an individual would like to have about his work environment and what is actually felt about the work environment.

Intrinsic Satisfaction. Intrinsic Satisfaction is an affective state experienced by a person either during or following the completion of a set of task behaviors. This affective state is self- or task-mediated.

Extrinsic Satisfaction. Extrinsic Satisfaction is an affective state experienced by a person following the completion of a set of task behaviors. This affective state experienced by a person is regulated by a source external to the person and the immediate task.

General Satisfaction. General Satisfaction refers to overall job satisfaction which is the sum of facet satisfaction across all facets of a job.

Role Conflict and Ambiguity

The definitions of Role Ambiguity and Role Conflict proposed by Rizzo, et al. (1970:155-156) were adopted for this study.

Role Ambiguity. Role Ambiguity is defined in terms of (1) the predictability of the outcome or responses to one's behavior, and (2) the existence or specificity of behavioral requirements, often in terms of inputs from the environment, which would serve to guide behavior and provide knowledge that the behavior is appropriate.

Role Conflict. Role Conflict is defined in terms of the dimensions of congruency-incongruency or compatibility-incompatibility in the requirements of a role, where congruency or compatibility is judged relative to a set of standards or conditions which impinge upon role performance.

Task Characteristics

The definitions of the task characteristics Task Autonomy, Task Repetitiveness and Task Structure proposed by Stinson and Johnson (1975b:1) were adopted for this study.

Task Autonomy. Task Autonomy is the extent to which an individual perceives that he has the freedom and opportunity to make decisions regarding the performance of his task.

Task Repetitiveness. Task Repetitiveness is the extent to which an individual perceives himself to be performing the same task, over and over, with a relatively short time cycle.

Task Structure. Task Structure is the extent to which an individual perceives himself to be required to use a specific set of steps or a structured procedure in performing his task.

THESIS OUTLINE

In Chapter II the essential features of the Path-Goal Theory of Leadership are stated. The conceptual base upon which the Theory is built and the research context within which this Theory of Leadership fits is also described. A more complete statement of the Path-Goal Theory of Leadership is found in Chapter III along with the development of a conceptual framework for this study. In the process of developing this framework, the relevant studies testing the Path-Goal Theory are reviewed. Hypotheses formulated for testing in this study as a result of considering Path-Goal Theory propositions and the relevant studies are presented together at the end of the chapter. The research methodology and instrumentation used in this study are outlined in Chapter IV. The data collection techniques and the characteristics of the respondents are also discussed. In Chapter V the analysis of responses to the Leader Behavior Questionnaire, including factor analyses, are reported and discussed. The analyses of responses to the Role Perception, Task Description and Minnesota Satisfaction Questionnaires are reported and discussed in Chapter VI. In Chapter VII, bivariate relationships between leader behaviors and role perceptions, leader behaviors and task characteristics, role perceptions and the satisfaction of subordinates, and task characteristics and subordinates' satisfaction are analyzed and discussed. The analyses and discussion of the relationships between types of satisfaction and Leader Directive Behavior, Leader Participative Behavior and Leader Achievement-Oriented Behavior are reported in Chapters VIII, IX and X respectively. Finally, in Chapter XI a synthesis of the findings from previous chapters is attempted, the nature of the three leader behaviors is discussed, the findings are interpreted within the context of Path-Goal Theory of Leadership propositions and implications are drawn for practice and further research.

CHAPTER II

PATH-GOAL THEORY IN CONTEXT

The purpose of this chapter is to place the Path-Goal Theory of Leadership in the context of research in the area of leadership. Initially, essential features of the Path-Goal Theory are outlined. A more detailed account is given in Chapter III. Then the Path-Goal Theory is set in the context of the expectancy theory from which it is derived. Research trends found in the voluminous literature on leadership are then reviewed and the Path-Goal Theory is set in the context of this research. The concluding section of the chapter reviews general assessments of the Path-Goal Theory of Leadership.

INTRODUCTION TO THE PATH-GOAL THEORY

The path-goal approach to leadership has its roots in motivational theory described as expectancy theory. In the path-goal approach, leader behavior is postulated to have its most direct effects on the motivation of subordinates. Leader behavior directed towards the accomplishment of a subordinate's personal goals and the concurrent achievement of organizational goals is most effective. The attainment of organizational and personal goals yields rewards which are necessary for satisfying and further motivating subordinates. A strategic function of the leader is to clarify for members of an organization the kinds of behavior required for the attainment of organizational and personal goals. Clarification of the appropriate kinds of behavior for subordinates is equivalent to showing subordinates the path to the accomplishment of both types of goals. For example, coaching and direction provided by a leader reduce frustrating barriers to the attainment of work goals. Since the motivational functions of the leader are stated in terms of paths and goals, the theory is referred to as the Path-Goal Theory of Leadership. The development of the Path-Goal Theory from expectancy theory is discussed in more detail in the next section.

The Path-Goal Theory of Leadership also postulates that the effects of leader behavior on the motivation of subordinates are moderated by the characteristics of subordinates and environmental factors such as the subordinate's task, the formal authority system and the subordinate's primary work group in an organization. The specific kinds of leader behavior and the frequency of these behaviors required to motivate and satisfy subordinates differ according to the situation in the organization. In this sense, leader behavior in an organization complements the work environment. This feature of the Path-Goal Theory of Leadership emphasizes accounting for situational factors in determining the appropriateness of various kinds of leader behavior. For this reason, Path-Goal Leadership Theory research may be viewed as an extension of earlier leader behavior research. The Path-Goal Theory of Leadership is discussed in this context and in the context of general trends in leadership research in the third section of this chapter.

Because the Path-Goal Theory of Leadership is built upon a conceptual base in expectancy theory and also takes account of situational factors, the Theory has the capacity to suggest the most appropriate leader behavior in a given situation as well as why that leader behavior is most effective. In Chapter III the statement of the Path-Goal Theory is further developed, a summary of the path-goal relationships is presented diagrammatically, the relationships demonstrated to date are reported and the capacity of the Theory to explain previously confusing findings are discussed.

PATH-GOAL LEADERSHIP THEORY AND EXPECTANCY THEORY

Evans (1970:277-298), who first proposed a path-goal theory of leadership, stated that it was derived from path-goal theory as propounded by Georgopoulos, Mahoney and Jones (1957:345-353) and the supportive expectancy theory of motivation.

In essence, Georgopoulos et al. proposed that an individual's motivation to produce at given levels depends upon his particular needs as reflected in the personal goals toward which he is moving, and his perception of the relative usefulness of productivity behavior as a path to attainment of these goals. However, this proposition is qualified by stating that the need must be sufficiently high, no other economical paths must be available and there must be a lack of restraining practices.

Vroom (1964) developed a motivational model which extends these relationships. Motivation was defined by Vroom (1964:6) as a process governing choices made by persons or lower organisms, among alternative forms of voluntary activity. The theory asserts that a person's preference choice among "first-level outcomes," such as high or low productivity, is determined by the expected relationship to possible "second-level outcomes," such as fringe benefits, supervisor support, promotion, group acceptance or money. Two concepts, Valence and Instrumentality, were used by Vroom to explain how preferences are determined. Valence referred to the strength of an individual's desire for a particular outcome and may be measured by a ranking of important personal goals in order of desirability. Instrumentality referred to an individual's perception of the relationship between a first-level outcome and a second-level outcome. Instrumentality may be measured by rating scales which involve perceived differences in the direction and strength of relationships between various first- and second-level outcomes.

The concept of expectancy refers to the perception of the likelihood that a particular action or effort will be followed by a particular first-level outcome. Expectancy differs from instrumentality in that it relates efforts to first-level outcomes, whereas instrumentality relates first- and second-level outcomes to each other.

According to Porter et al. (1975:56) the expectancy theory postulates that motivational "force" to engage in a behavior is a product of valency and expectancy. Moreover, according to House and Mitchell (1974:81), an individual's attitudes can be predicted from expectancies and valences. Subordinates are satisfied with their job if it leads to highly valued outcomes. Subordinates are also motivated to work hard if the effort involved leads to highly valued rewards.

Evans (1970:277-298) asserted that leaders will be effective by making rewards available to subordinates contingent upon the accomplishment of specific goals. Leader supportiveness, that is, concern for welfare, status and comfort is a reward that a leader has at his disposal for use in motivating subordinates. Evans showed that when subordinates viewed leaders as being supportive and direction and guidance to subordinates was provided, there was a positive relationship between leader behavior and subordinates' performance ratings. However, leader behavior was only related to subordinates' performance when the leader's behavior was also related to the subordinates' expectations that their effort would result in desired rewards. House and Mitchell (1974:83) concluded that these findings suggest that the major impact of a leader on the performance of subordinates is clarifying the path to desired rewards and making such rewards contingent on effective performance.

House (1971:322) stated that the Path-Goal Theory of Leadership differed from the theory presented by Evans (1970:277-298), in that its predictions were contingent on situational variables, and attempted to account for conflicting findings with respect to the relationship between leader behavior and the satisfaction and performance of subordinates.

Expectancy theory provides a theoretical rationale which can be used to explain why leaders behave the way they do, or how leader behavior has effects on subordinate attitudes and behavior.

AN OVERVIEW OF LEADERSHIP

Leadership is a social phenomenon which has a different meaning for many people. Fiedler (1971:1) commented that there are almost as many definitions of leadership as there are leadership theories. Pfeffer (1977:104) stated that ambiguity in definition and measurement was one of the problems with the concept of leadership. This ambiguity was illustrated by Barrow (1977:234), who listed several views of leadership as follows:

> (a) a focus of group processes; (b) a set of personality characteristics; (c) the act of inducing compliance; (d) the exercise of influence; (e) an act or behavior; (f) a form of persuasion; (g) a power relation; (h) an instrument of goal achievement; (i) an effect of interaction; (j) a differentiated role; and (k) the initiation of structure.

Personality Traits

In common parlance, the focus of leadership is frequently upon the personality traits of great men. Gouldner (1965:22) quoted the philosopher Bertrand Russell who stated that the leader must excel in self-confidence, quick decision-making, and skill in deciding right measures. Burlinghame (1973:52-58), who analyzed several biographies of educational leaders, included the following as commonalities of educational leaders: (a) a sense of missionary zeal; (b) an ethic of work; (c) some type of philosophical, intellectual base; (d) a tendency to become obsolete within the social context; (e) an ethic of practicality; and (f) geographic and vertical occupational upward mobility.

Early empirical studies of leadership employed forms of controlled observation. The end point of these studies was usually a long list of adjectives describing a leader. Gouldner (1965:22) cited a review of twenty studies of this kind in which a total of seventy-nine traits were mentioned.

The inadequacies of the trait approach were discussed by Gouldner (1965:23-25), who stated that lists of traits do not suggest which are most important or least important. Furthermore, the lists contain traits which are not mutually exclusive. Stogdill (1948:35-71), who surveyed the literature associating personal factors with leadership, concluded that leadership is, to a great extent, situational. Barrow (1977:232) added emphasis to Stogdill's conclusion by stating that personality traits related to effective leadership in one situation were not generally predictive in other situations. Stogdill (1948:35-71) also concluded that the magnitude of correlations between lists of traits and actual group or subordinate performance is generally so low that the usefulness of personality traits in selecting individuals for leadership positions or as a basis of a theory of leadership is extremely limited. This conclusion is echoed by Gouldner (1965:21-49), Hersey and Blanchard (1977:89), and Porter (1975:423).

The Group Theorists' Approach

An approach to leadership which contrasts with the leader personality emphasis was developed by the group theorists. Homans (1950:188), who stated that a leader is the man who comes closest to realizing the norms which the group values most highly, is representative of the group theorists' approach. According to Cartwright and Zander (1953:540), the concept of leadership in a group incorporates two ideas: (a) any member of a group may be a leader in the sense that he takes actions which serve group functions, and (b) a given function may be served by many different behaviors, that is, a change of task requires different behavior which may or may not be performed by the same person.

The group theorists differentiated between formal and emergent leadership. The formal leader is appointed or explicitly elected. The emergent leader, or informal leader, is the person in the group with the most influence, regardless of his office in an organization. Homans (1950:188) stated that the man who comes closest to conforming to group norms, has influence which implies the right to assume control of the group. Another explanation ~~of~~ the emergence of a leader is given by Bavelas (1970:119). Leadership in a group may be described in terms of those acts which help the group to achieve its objectives and to satisfy its needs. The members of a group who perform these acts emerge as leaders. These two explanation suggest that an emergent leader is expected to maintain established behavior as well as act to change behavior of group members. In recognition of this role conflict, Hollander (1958:117-127) suggested that the leader needs to gain the confidence of the group by conformity and achievement in order to earn "idiosyncrasy credits" which allow him to depart from group norms and expectations. The leader who never departs from group expectations may fail in crisis situations which call for creativity and new methods.

The description of leadership in terms of group functions or leadership acts, presents problems for the group theorists. Olmsted (1959:135) stated that many different functions are performed by various group members, allowing the leader to attend to crucial functions only. However, Cartwright and Zander (1953:539) stated that a fully satisfactory designation of those group functions which are peculiarly functions of leadership has not been developed. Olmsted (1959:137-138) suggested that rather than continuing to emphasize "leadership," it is possible and, for the student of small groups, advantageous, to refocus on the concept of group organization. From this perspective, leadership can be treated as a special case of the general phenomenon of role differentiation.

Leader Behavior Studies

Leader behavior studies shifted the emphasis from emergent leadership and leader personality traits to the study of what a formal leader in an organization actually does. One of the earliest typologies of leader behavior was developed at Ohio State University. Stogdill (1974:128) stated that a list of approximately 1800 items describing leader behavior was reduced to 150 items and sorted into nine hypothetical subscales to form the basis of the first form of the Leader Behavior Description Questionnaire (LBDQ). Several factor analytic studies of the items yielded two orthogonal dimensions of leader behavior identified as Consideration and Initiating Structure. Halpin and Winer (1957:42) defined Consideration as behavior indicative of friendship, mutual trust, respect and warmth. Initiating Structure referred to behavior related to the definition of relationships or roles and the establishment of well-defined patterns of organization within a group by a leader. These two factors accounted for more than eighty percent of the total variance in leader behavior.

Several other typologies of leader behavior have been developed. For example, at the University of Michigan, Kahn and Katz (1953:612-628) derived two dimensions of leadership behavior in groups, namely, Employee Orientation and Production Orientation. Cartwright and Zander (1953: 539) reinterpreted these two dimensions of group behavior as the leader behavior dimensions, Group Maintenance and Group Achievement. Cunningham and Gephart (1973:146) examined nineteen typologies which proposed two dimensions of leader behavior similar to those developed at Ohio State and Michigan Universities. Among others, Initiating Structure, Production Orientation and Group Achievement dimensions were grouped together, as were the Consideration, Employee Orientation and Group Maintenance dimensions of leader behavior. This classification of leader behavior dimensions suggests there is an equivalence among person- or relationship-oriented dimensions and work- or goal-oriented dimensions of leader behavior.

According to Kerr et al. (1974:63), LBDQ research has been worthwhile for several reasons: (a) the leadership scales are descriptive of behaviors which are readily identifiable, and raters can agree on what behaviors they have observed; (b) the scales have a common sense look about them which is appealing to the practising manager; (c) numerous studies have used the Ohio State Leadership scales, and much of the research has generated normative data; and (d) the scales have the advantage of being factor analytically determined.

The most serious criticisms of LBDQ research (Korman, 1966:349-361) have been that the studies fail to take into account situational variables and they lack a conceptual base.

In answer to the first of these criticisms, Kerr et al. (1974:73) reviewed the LBDQ research literature which related behavior to situational variables, and then developed situational propositions about leader behavior. Several situational elements related to the behavior of leaders were delineated and classified as subordinate, supervisor and task considerations. Situational elements described as subordinate considerations included personality, expectations concerning leader behavior, hierarchical level of position, knowledge and experience. Important situational elements relating to supervisors were described as the similarity of the supervisor's attitudes and behavior to those in higher management and the supervisor's upward influence. Situational elements described as task considerations included time urgency, job autonomy, and degree of stress and ambiguity.

Criticism with respect to a lack of a conceptual base stems from the factor analytic techniques employed to describe dimensions of leader behavior. Pfeffer (1977:105) stated that this procedure tends to produce as many factors as the analyst decides to find. In addition, Pfeffer (1977:105) stated that the resultant factors must be named, and deciding on a summative concept to represent a factor is partly a subjective process. Furthermore, Stogdill (1974:419) pointed out that although factor analysis suggests two dimensions of leader behavior which have been variously labelled, it is erroneous to regard leader behaviors within each cluster as identical patterns of behavior. Autocratic, restrictive, task-oriented, socially distant, directive and structured leader behaviors are usually considered to constitute a work-oriented cluster of behaviors, but these behaviors have been shown to be associated with different effects on measures of group productivity, cohesiveness and satisfaction.

Another criticism of leader behavior studies has been advanced by Barrow (1977:233). He stated that leader behavior dimensions have been utilized to distinguish effective from ineffective leadership by specifying actual leader behaviors and then attempting to determine which behaviors correlate with criteria such as subordinate performance and satisfaction. According to Barrow (1977:233), little can be concluded about process and causality relationships using this research design.

Leadership Effectiveness Approaches

Two approaches to leadership effectiveness which emphasize process and causality relationships can be identified in the research literature. The normative approach, as described by Barrow (1977:235), prescribes what a leader should do to be effective in a given situation. An alternative view is to focus on the total leadership process including the leader, followers, the work situation and the interdependence among these sets of variables. Hammer and Dachler (1975:61) stated that in the process approach, prediction of effectiveness is a necessary part of the paradigm, but only as a means to the understanding of the psychological entities involved in the concept of leadership and their causal effects on other concepts rather than as an end in itself.

Normative Approaches to Leadership

The Managerial Grid developed by Blake and Mouton (1964) is a normative approach to leadership which incorporates the findings of the Ohio State studies of leader behavior. The points on the Grid are to be considered as descriptions of the assumptions underlying leader behavior patterns. Thus, Concern for Production and Concern for People underlie the leader behaviors, Initiating Structure and Consideration. Blake and Mouton (1964:10) described five behavioral styles which may be exhibited by a leader as follows: (a) Impoverished - low concern for production and people; (b) Country Club - low concern for production, high concern for people; (c) Task - high concern for production, low concern for people; (d) Middle Road - medium concern for production and people; and (e) Team - high concern for production and people. According to Blake and Mouton (1964:144), the ideal behavioral style to be used in most situations is the Team style since this style creates conditions of work where people have an understanding of the problem, a stake in the outcome and can see the results of their contributions. However, Kerr et al. (1974:63) concluded that it seems an oversimplification to claim that the effective leader needs "merely" to behave in a highly considerate and structuring manner. The research literature suggests much more subtlety.

The three-dimensional (3-D) Management Style theory (Reddin, 1970) was the first to add an effectiveness dimension to the concern for production and people dimensions of the model developed by Blake and Mouton. Reddin (1970:13) proposed four basic managerial styles, each one representing a mix of task-oriented and relationship-oriented styles. However, the basic issue in management behavior was the concept of effectiveness. Reddin (1970:2) stated that effectiveness is not a quality a manager brings to a situation, rather it is the extent to which the manager achieves the output requirements of his position. According to Reddin (1970:66), five situational elements, namely, the type of organization, technology, superordinates, coworkers and subordinates can be assessed to indicate the required leadership style.

Barrow stated that:

> the contributions of this model are its specification of leader behaviors associated with each effective and ineffective style; comprehensive delineation of situational factors which may affect the leader; and recognition that the effectiveness of behavior style is contingent upon the situation.

However, Barrow (1977:235) pointed out that little research has been done to test its predictions, perhaps due to its complexity. He also criticizes the theory on the grounds that the model leaves little room for the leader's behavioral style to affect the work situation.

Hersey and Blanchard (1977:104-108) also developed a tri-dimensional model of Leadership Effectiveness. An effectiveness dimension was added to the Initiating Structure (task behavior) and Consideration (relationship behavior) behavioral dimensions of the earlier Ohio State leadership model. Hersey and Blanchard (1977:105) acknowledged their debt to Reddin's 3-D model. However, they argued that although attitudinal models such as Reddin's are not necessarily incompatible with behavioral models, differences occur when behavioral assumptions are drawn from the attitudinal models. For example, although high concern for both people and production in organizations is very desirable, a high-task-high-relationship behavioral style may not be the most appropriate, depending upon the situation.

According to Hersey and Blanchard (1977:108), empirical studies tend to show that there is no one best style of leadership. Successful leaders adapt their behavior to meet the needs of the group and of the particular environment. Leader behavior should change as the maturity of the group being led increases. As subordinates' maturity increases, leader behavior should be characterized by a decreasing emphasis on structuring behaviors, and an increasing emphasis on considerate behaviors, followed by a decreasing emphasis on considerate behaviors as well as structuring behaviors as full maturity is approached. Maturity is defined in terms of subordinates' achievement motivation, willingness and ability to take responsibility, and the experience level of the group.

In criticism of Hersey and Blanchard's theory, Barrow (1977:236) stated that it neglects many situational variables influencing the relationships between leaders and subordinates. Moreover, the definition of maturity, which would be difficult to measure, has not been tested.

A more general criticism of theories of leadership effectiveness is offered by Pfeffer (1977:106). He states that there is surprisingly little evidence on the magnitude of the effects of leadership. Pfeffer (1977:106) gives three reasons for arguing that the observed effects of leaders on organizational outcomes would be small as follows:

> First, those obtaining leadership positions are selected, and perhaps only certain limited styles of behavior may be chosen. Second, once in the leadership position, the discretion and behavior of the leader are constrained. And third, leaders can typically affect only a few of the variables that impact organizational performance.

Approaches to the Leadership Process

In contrast to the normative theories of leadership effectiveness, Fiedler's (1967) Contingency Model and House's (1971) Path-Goal Theory of Leadership Effectiveness focus upon the leadership process, that is, the interaction of leader, follower and other situational variables.

Fiedler and Chemers (1974:81) stated that:

> the Contingency Model leads to the major hypothesis that leadership effectiveness depends upon the leader's style of interacting with his group members and the favorableness of the group-task situation.

Leadership style is measured by a scale designed to score a leader's esteem for the least preferred coworker (LPC). Situation favorableness is defined in terms of eight possible combinations of scores on three dimensions: (a) the quality of leader-member relationships; (b) the extent to which a task is structured; and (c) the position power of the leader in the group. Task-oriented (low LPC) leaders are predicted to be more effective in either highly favorable or highly unfavorable situations, whereas relations-oriented (high LPC) leaders are more effective in situations of moderate favorability.

Graen et al. (1971:205-210) have criticized the Contingency Model on the grounds that (a) it is not clear how the LPC score should be interpreted; (b) nonsignificant directional findings have been used to support the theory; and (c) careful post hoc ordering of situational favorability data has occurred to gain support for the theory. Fiedler and Chemers (1974:74) acknowledged the criticism of the LPC measure by stating that the road to understanding LPC has been a frustrating odyssey, but it now appears that LPC is an index of a motivational hierarchy of behavioral preferences implying that some goals are more important to some individuals than others. In assessing reviews of the Contingency Model, Barrow (1977:234) suggests that the criticisms indicated the model may need to be revised or expanded, but the methodology does not appear to be flexible enough to allow for incorporation of new variables. Despite difficulties, Fiedler and Chemers (1974:89) claim that the Contingency Model is one of the best validated leadership theories. Furthermore, the Model continues to generate interest and research studies.

The Path-Goal Theory of Leadership (described in detail in the following chapter) approaches the interaction of leader, follower and other situational variables in a different way. Barrow (1977:235) describes the theory as follows:

> Based on the assumption that subordinate performance and satisfaction will be improved if the leader can clarify goal paths and provide valued reinforcement, a moderator-variable methodology is used to predict relationships between the leader's behaviors of consideration and initiating structure and performance/ satisfaction criteria.

The Path-Goal Theory differs from the Contingency Model in that it is concerned with specific leader behaviors rather than generalized leadership styles. Landy and Trumbo (1976:367) state that leader behavior refers to the particular acts of a leader, whereas leadership style refers to the more enduring underlying need structure of an individual which motivates behavior. Leader behavior studies have been criticized because the factor analytically derived dimensions lack a conceptual base. The Path-Goal Theory (House, 1971:321-338) defines the psychological properties of the leader behavior dimensions--Consideration and Initiating Structure--in terms of their potential meaning for path-goal perceptions of subordinates. The leader behaves in a way that clarifies for subordinates the kind of behavior which leads to goal accomplishment and valued rewards, hence the term path-goal.

A comparison of the Contingency Model and the Path-Goal Theory is difficult to make because the two are applicable at different levels within an organization. Osborn (House and Dessler, 1974:58) states that House and Dessler confine their hypothesis testing to individual psychological states, while Fiedler seems to concentrate upon group performance. Furthermore, situational variables are used differently in the two theories. Fiedler describes a limited number of situational variables (group acceptance, task structure and leader position power) which are presumed to interact with leadership style to determine performance. The Path-Goal Theory also proposes important situational variables in leadership processes (subordinate characteristics, primary group characteristics, the formal authority system and the subordinate's task), but presumes that these variables moderate the relationships between leaders and their subordinates. Unlike the Contingency Model, the Path-Goal Theory is sufficiently flexible to allow consideration of an unlimited number of situational variables.

These various approaches to leadership clearly indicate that no general theory of leadership exists, rather several middle-range theories exist in the research literature. Zetterberg (1963:2) states that when a theory is called partial or middle-range, it is admitted that there are other theories which are not contradicted by, or synonymous with, the theory so described. This statement seems to sum up the state of theorizing on leadership. This situation may be inevitable when leadership is the concern of so many diverse groups such as psychologists, social psychologists, business and educational administrators and practicing managers.

The Path-Goal Theory of Leadership is but one of these several middle-range theories. The Theory may be viewed as an extension of that research strand which is concerned with leader behaviors. The new additions to leader behavior research made by the development of the Path-Goal Theory are that situational factors are accounted for by the Theory, and a conceptual base is provided which enables explanation of why specific leader behaviors are most effective in given situations.

AN ASSESSMENT OF PATH-GOAL LEADERSHIP THEORY

In reviewing the Path-Goal Theory of Leadership, Behling and Schriesheim (1976:309) suggest that the foundations of the Theory may be questionable to the extent that expectancies and valences are not part of the work effort decision process. Further, the Theory was constructed in part, post hoc, so that evidence used to support it was also used to build it. Nevertheless, the conclusion reached was that although the evidence for the Path-Goal Theory was neither plentiful nor completely supportive, in general terms the Theory is supported.

In another review of the Path-Goal Theory of Leadership, Barrow (1977:235) states that support has been found with respect to subordinates' satisfaction but not the performance of subordinates. However, the assertion made was that the emphasis on moderator variables influencing leader-subordinate relationships has created a much needed new direction for leadership research.

According to Dessler (1976:173), the ideas that the appropriate level of leader structuring behavior depends upon how ambiguous the task is, and that the necessary level of leader consideration behavior varies with the intrinsic satisfaction of the task, have both received support.

When the manuscripts for these reviews were prepared, several studies of the Path-Goal Theory of Leadership appear not to have been available to the authors. The comments made by Behling and Schriesheim (1976:309) seem to be applicable to the account of the Theory given by House and Dessler (1974:29-62), but not to the expositions of House and Mitchell (1974:81-97). The latter presentation refers to several manuscripts published in 1975 and 1976, and no post hoc theory construction is attempted. The account given by Dessler (1976:173) does not make reference to several studies published subsequent to 1974. Nevertheless, the conclusions drawn still seem to be valid.

Consideration of the present state of research suggests that definitive assessments of the Path-Goal Theory cannot, as yet, be made. The studies published to date have indicated that not all the postulated moderator variables have been tested. Even so, the Theory is sufficiently flexible to allow further expansion in the scope of leader behaviors, moderator variables and subordinate attitudes and behavior accounted for in its statement. Clearly, the Path-Goal Theory has generated, and will continue to generate, further research to test and extend its basic propositions.

CHAPTER III

A CONCEPTUAL FRAMEWORK

In this chapter a detailed statement of the Path-Goal Theory is presented. Those aspects of the Path-Goal Theory of Leadership selected for testing in this study are described, and the development of research hypotheses based upon this choice is undertaken. The hypotheses developed for testing in this study were derived from the statement of the Path-Goal Theory and the relevant studies which have tested the basic propositions of the Theory. When the relevant studies are considered, the aspect of ~~a study~~ relevant to a particular section is dealt with in that section, and as a consequence, references to the same study occur in different sections.

Finally, the major hypotheses and the several specific hypotheses derived from the major hypotheses are presented together at the end of the chapter.

THE PATH-GOAL THEORY OF LEADERSHIP

The basic components of the Path-Goal Theory were introduced in the first sections of Chapters I and II. A comparison of the Path-Goal Theory with other leadership theories was also made in Chapter II. In this section a more detailed account of the Path-Goal Theory is presented. The presentation is based upon revised statements of the

Path-Goal Theory of Leadership made by House and Dessler (1974:29-62) and by House and Mitchell (1974:81-97). The purpose of the presentation is to provide the basis for a conceptual framework from which research hypotheses may be developed.

Basic Propositions

The two essential features of the Path-Goal Theory delineated in previous chapters relate to the motivational effects and to the complementary nature of leader behavior. Leader behavior is motivational and satisfying to subordinates to the extent that it leads to highly valued outcomes. The complementary nature of leader behavior is reflected in the way in which the effects of leader behavior are moderated by situational factors. These two features are incorporated into the statement of the two basic propositions made by House and Mitchell (1974:84) as follows:

> (a) leader behavior is acceptable and satisfying to subordinates to the extent that the subordinates see such behavior as either an immediate source of satisfaction or as instrumental to future satisfaction. (b) the leader's behavior will be motivational, that is, increase effort, to the extent that (1) such behavior makes satisfaction of subordinates' needs contingent on effective performance and (2) such behavior complements the environment of subordinates by providing the coaching, guidance support and rewards necessary for effective performance.

The Path-Goal Theory of Leadership is, in essence, a tentative explanation of the effects of leader behavior. The explanation is tentative because, according to House and Dessler (1974:30), the listing of the variables dependent on leader behavior is incomplete. However, both presentations listed three effects of leader behavior on the attitudes and expectations of subordinates as (1) job satisfaction, (2) acceptance of the leader by subordinates and (3) expectations by subordinates that effort leads to effective performance and that effective performance is the path to rewards.

Contingency Factors

The theory, as originally stated by House (1971: 321-338), was revised and extended to account for the characteristics of subordinates and environmental factors in assessing the effects of leader behavior. House and Dessler (1974:29) state that several "intermediating" variables can alter the relationships between leader behavior and the indirect effects of leader behavior that have been studied, for example, overall satisfaction and performance. These variables are referred to as "contingency factors" in the statement of the Theory. A "contingency factor" is defined by House and Dessler as a variable which moderates the relationship between two other variables such as leader behavior and subordinate satisfaction. The two contingency variables proposed by House and Mitchell (1974:85) were personal characteristics of subordinates, and the environmental pressures and demands with which subordinates must cope in order to accomplish the work goals and satisfy their needs. House and Dessler (1974:31) referred to these variables as two classes of situational variables. Both presentations of the theory acknowledged that other situational variables may also be important determinants of the effects of leader behavior, but they are not presently known.

Characteristics of Subordinates

Whether or not leader behavior is perceived to be satisfying and acceptable to subordinates, either immediately or in the future, partially depends upon the characteristics of subordinates.

House and Mitchell (1974:85) state that the relationship between leader behavior and the satisfaction of subordinates is moderated by the degree to which a subordinate sees the environment as responding to his or her behavior. On a locus-of-control measure, subordinates who believe that what happens to them occurs because of their behavior are called "internals," whereas subordinates who believe that what happens occurs by luck or chance are called "externals." Mitchell et al. (1975:623-631) found that internals are more satisfied than externals with participative leader behavior, and externals are more satisfied than internals with directive leader behavior.

House and Dessler (1974:31) state that subordinates with high needs for affiliation and social approval would see friendly, considerate leader behavior as an immediate source of satisfaction. Leader directiveness would be more satisfying to those subordinates with high needs for achievement since such behavior may clarify path-goal relationships and provide goal-oriented feedback. Leader directiveness would also be viewed as satisfying to subordinates who valued extrinsic rewards, if such leader behavior assisted them to gain recognition, promotion, security or pay increases.

Both presentations of the theory suggest that subordinates' perceptions of their own ability with respect to assigned tasks is an important moderator of the effects of leader behavior. The higher the degree of perceived ability relative to task demands, the less the subordinate will view leader directiveness and coaching behavior as acceptable. If the perceived ability of the subordinate is high, then directive leader behavior is likely to have little effect on the motivation of the subordinate and to be perceived as excessively close control. In this sense, the acceptability of the leader is determined by the personal perceptions of the subordinate's own ability, that is, a characteristic of a subordinate.

Environmental Factors

The second contingency variable, the environment of the subordinate, consists of those situational factors which are not within the control of the subordinate but which are important to need satisfaction or ability to perform effectively. House and Dessler (1974:32) stated that three broad classifications of relevant environmental moderators are:

1. The subordinate's task;
2. The formal authority system of the organization; and
3. The primary work group.

The aspects of the environment that have invariant moderating effects independent of the characteristics of subordinates have yet to be determined empirically. Nevertheless, the three classifications of environmental moderators are hypothesized as having either independent moderating effects, or interacting significantly with a subordinate's characteristics as joint moderators of the effects of leader behavior.

Assessment of the environmental conditions makes it possible to predict the kind and amount of influence that specific leader behaviors will have on the motivation of subordinates (House and Dessler, 1974:33; House and Mitchell, 1974:87).

Each of the three classes of contingency factors could act upon the subordinate in any of three ways. First, these factors may serve as stimuli that motivate and direct the subordinate to perform task operations necessary for the attainment of goals. Second, these factors constrain variability in subordinate behavior. Constraints are motivational to the extent that they clarify path-goal relationships. A subordinate's expectation that effort leads to rewards is clearly established, and role conflict and ambiguity are reduced. Constraints may also be counterproductive in that initiative and increased effort, which increases rewards, is restricted. Finally, environmental factors may serve as the source of rewards for achieving desired performance. These rewards may be viewed as reinforcing desired behavior. When rewards required for satisfying subordinates and necessary cues to do the job come from sources other than the leader, for example, the primary work group, then the effect of the leader on a subordinate's motivation will be a function of how deficient the environment is with respect to motivational stimuli, constraints or rewards.

With respect to environmental contingency factors, House and Mitchell (1974:88) state that the Path-Goal Theory makes three assertions:

> 1. When goals and paths to desired goals are apparent because of the routine nature of the task, clear group norms or objective controls of the formal authority system, attempts by the leader to clarify paths and goals will be both redundant and seen by subordinates as imposing unnecessarily close control.

Although performance levels may be increased by preventing malingering on the job, such leader behavior will decrease satisfaction and induce dysfunctional activities by subordinates.

> 2. The more dissatisfying the task the more the subordinates will resent behavior by the leader directed at increasing productivity or enforcing compliance to organizational rules and procedures.

> 3. Leader behavior is predicted to increase subordinates' satisfaction with the job context and to be motivational to the extent that it increases the subordinates' expectations that their effort will lead to valued rewards.

Summary of Path-Goal Relationships

The basic propositions of the Path-Goal Theory, assertions about what effects leader behaviors have on subordinates, and the specification of contingency factors provide a heuristic framework on which to base research. Figure 1 presents in summary form the path-goal relationships which comprise the heuristic framework. The original presentation of the summary made by House and Mitchell (1974:89) has been redrafted to increase the clarity of presentation. Two of the three proposed influences of environmental factors have also been rewritten to include additional words used by House and Dessler (1974:33).

A CHOICE

Not all aspects of the Path-Goal Theory of Leadership can be tested in one study. Any attempt to do so would place unreasonable demands on the time and resources available to subjects chosen for the study. For this reason a choice must be made among the variables related to one another in the statement of the Theory. The framework presented in Figure 1, together with the several studies utilizing Path-Goal Theory propositions, provided the basis for the choice.

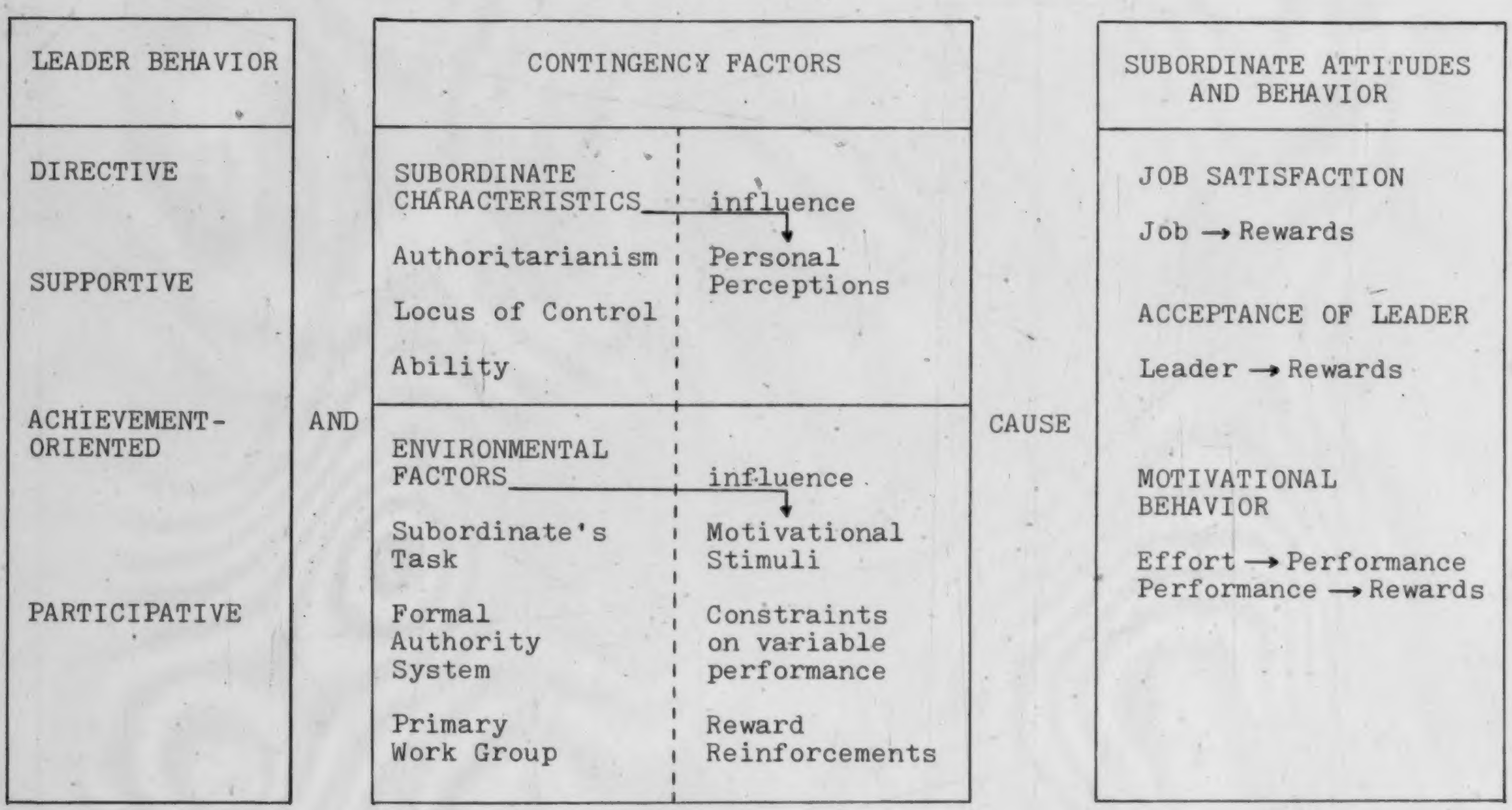

LEADER BEHAVIOR
DIRECTIVE
SUPPORTIVE
ACHIEVEMENT-ORIENTED
PARTICIPATIVE
AND
CONTINGENCY FACTORS
SUBORDINATE CHARACTERISTICS
influence
Authoritarianism
Personal Perceptions
Locus of Control
Ability
ENVIRONMENTAL FACTORS
influence
Subordinate's Task
Motivational Stimuli
Formal Authority System
Constraints on variable performance
Primary Work Group
Reward Reinforcements
CAUSE
SUBORDINATE ATTITUDES AND BEHAVIOR
JOB SATISFACTION
Job → Rewards
ACCEPTANCE OF LEADER
Leader → Rewards
MOTIVATIONAL BEHAVIOR
Effort → Performance
Performance → Rewards

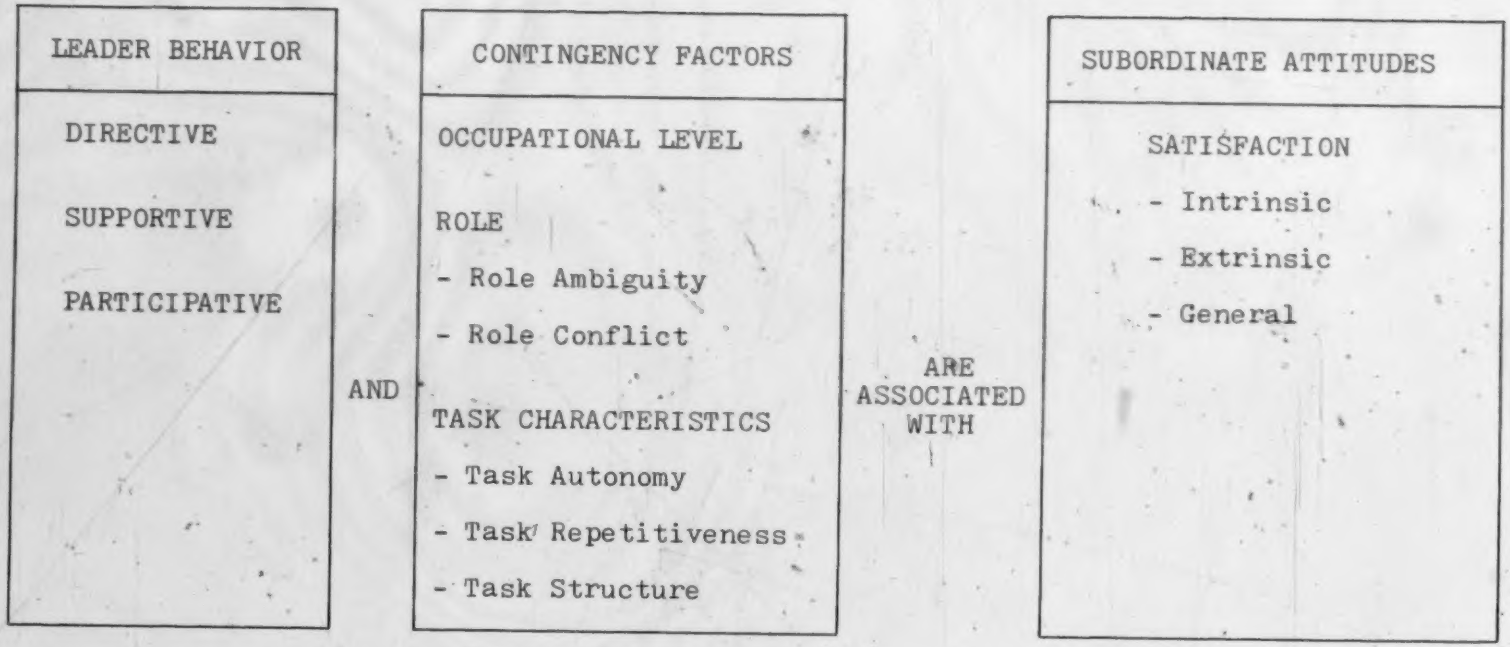
FIGURE 1

SUMMARY OF PATH-GOAL RELATIONSHIPS

Adapted from House and Mitchell (1974:89).

At a symposium at which the House and Dessler account of the Path-Goal Theory was presented, a question was raised about why the paper did not concentrate more on such variables as group process or environmental issues. House (House and Dessler, 1974:62) responded that it was a matter of personal choice for the researcher. He also indicated that choice is governed in part by the availability of precise measuring instruments. These considerations also comprised part of the basis for choices made in this study of school system personnel.

In addition, Barrow (1977:235) stated that support has been provided for the predictions of the Path-Goal Theory relating to the satisfaction of subordinates but not for the performance of subordinates. For this reason, the most appropriate research design seemed to be one that allowed investigation of the relationships between leader behavior and the satisfaction of subordinates. According to House and Dessler (1974:30), specific psychological states that may be affected by the leader are the subordinate's intrinsic job satisfaction and his satisfaction with extrinsic rewards. The satisfaction dimensions most applicable to the Theory, and therefore incorporated into the conceptual framework, were Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction. Figure 2 presents a framework for an empirical, but selective, test of the Path-Goal Theory. This framework forms a part of the summary of the Path-Goal



LEADER BEHAVIOR

DIRECTIVE

SUPPORTIVE

PARTICIPATIVE

AND

CONTINGENCY FACTORS

OCCUPATIONAL LEVEL

ROLE

- Role Ambiguity
- Role Conflict

TASK CHARACTERISTICS

- Task Autonomy
- Task Repetitiveness
- Task Structure

ARE ASSOCIATED WITH

SUBORDINATE ATTITUDES

SATISFACTION

- Intrinsic
- Extrinsic
- General

FIGURE 2

A FRAMEWORK FOR AN EMPIRICAL TEST OF THE PATH-GOAL THEORY OF LEADERSHIP

Theory relationships presented in Figure 1 except for one major modification. The following sections discuss the rationale for making the modification. The moderating effects of the contingency factors selected are also discussed.

MODIFICATION OF CAUSALITY

The major modification to the summary of the Path-Goal relationships presented in Figure 1 was to substitute the words "are associated with" for the word "cause" in the heading phrase, "leader behavior and contingency factors cause subordinate attitudes and behavior." This modification is incorporated into Figure 2.

The rationale for the modification is given by Kerr et al. (1974:65). The direction of causality between leader behavior and the attitudes of subordinates as well as work group performance has not been clearly established.

In a test of the Path-Goal Theory designed to investigate the direction of causality, Downey et al. (1976:171) found that the causal relationships proposed did not exist. Leader behavior was found to be related to subordinates' work attitudes and job performance, but these relationships were highly interactive rather than causal. The modification incorporated into Figure 2 takes account of these findings.

An important consequence of this modification relates to the use of the technical terms, "moderation" and "contingency factors." Contingency factors were defined by House and Mitchell (1974:85) as variables which moderate the relationship between two other variables. In this thesis these technical terms are used in the data analysis chapters and in Chapter XI, but when the terms are used causal relationships are not implied.

LEADER BEHAVIOR

Initial studies to test Path-Goal Theory predictions conducted by House (1971:321-338), were based upon two leader behavior factors, namely, Initiating Structure and Consideration. These behaviors were operationalized by the Leader Behavior Description Questionnaire (LBDQ), as described in Chapter II. Other studies have used the revised version of the LBDQ instrument developed by Stogdill (1963:2), known as the LBDQ-XII instrument, or the Supervisory Leader Behavior Questionnaire (SBDQ) adaptation of the LBDQ.

The use of these instruments in tests of the predictions of the Path-Goal Theory has been criticized by Schriesheim and Von Glinow (1977:398-400), because the instruments do not accurately operationalize the Theory's leadership constructs. Downey et al. (1975:260) state that the Path-Goal Theory requires the use of specific leader behaviors. Unexpected findings were attributed to the many participative leader behavior items contained in the leader Consideration dimension. Downey et al. (1975:260) suggest that participative leader behavior clarifies path-goal relationships and contaminates the effects of supportive leader behavior. Schriesheim and Kerr (1974:756-765) examined the psychometric properties of the LBDQ, LBDQ-XII, SBDQ, and the Leadership Opinion Questionnaire (LOQ) and found that all but the LBDQ-XII include items which measure extraneous leader behavior dimensions. These dimensions were described as punitive, autocratic and production-oriented leader behaviors.

House and Dessler (1974:43) developed an instrument to take account of the types of criticism cited above. Three types of leader behavior were chosen for their test of the Path-Goal Theory of Leadership, namely, Instrumental, Supportive and Participative Leadership. The leader behavior items selected to operationalize these constructs were taken primarily from the LBDQ-XII questionnaire. The Instrumental Leadership Scale was similar to the LBDQ-XII Initiating Structure Scale, but differed from other versions in that it did not include items reflecting autocratic or punitive leader behavior. The Supportive Leadership Scale, unlike the LBDQ and SBDQ versions, did not include participative items. The Participative Leadership Scale comprised items developed specifically by House and Dessler (1974:43), as well as items from the LBDQ Consideration Scale which reflected participative leadership.

In this study of school system personnel these three kinds of leader behavior were chosen and the House and

Dessler questionnaire was adopted as a suitable operationalization of the leader behavior constructs. The instrument is further discussed in Chapter IV. However, the scale named "Instrumental Leadership" was renamed "Leader Directive Behavior," thus avoiding confusion with the term "instrumentality" which has a different though related usage in expectancy theory.

This change is also consistent with the presentation of the Path-Goal Theory made by House and Mitchell (1974:81-97). Directive Leadership is characterized by a leader who gives specific guidance about what should be done and how it should be done. Supportive Leadership is indicative of warmth in relationships with subordinates. Participative Leadership is characterized by consultation with subordinates before action is taken. Full definitions are given in Chapter I.

CONTINGENCY FACTORS

Contingency factors associated with differences in relationships between leader behavior and the satisfaction of subordinates are occupational level and perceptions of role and task characteristics. These factors are discussed in the following sections.

Occupational Level

Occupational level has been found to be an important moderating variable in relationships between leader behavior and satisfaction although results have been confusing. For example, Nealey and Blood (1968:414-422) found leader Initiating Structure to be positively related to satisfaction at a low supervisory level but negatively related to satisfaction at a higher level. However, House et al. (1971:19-30) found a strong positive correlation between Initiating Structure and satisfaction of high-level subjects. Kerr et al. (1974:68) stated that while a majority of studies which considered job level as a moderating variable are in agreement about its importance, no clear consensus yet exists concerning the nature of its moderating effects.

Szilagyi and Sims (1974:622-634) developed hypotheses for testing the Path-Goal Theory on the basis that task ambiguity and role ambiguity increase with occupational level. Their findings supported this proposition. In this sense, the moderating effects of occupational level may be reflected in the moderating effects of role ambiguity and task ambiguity on relationships between leader behavior and satisfaction.

Downey et al. (1975:252-262) examined the effect of leader behavior on subordinates' performance under conditions of both structured and unstructured tasks. The assumption made was that managers performed unstructured tasks. The moderating effects of occupational level were reflected in the findings relating to task structure. Some support was found for the moderating effects of occupational level on relationships between leader Consideration behavior and the satisfaction of subordinates. Dessler and Valenzi (1977:253) tested the hypothesis that the higher the occupational level of the group, the more positive the relationship between Initiating Structure and intrinsic job satisfaction, but found no support for this hypothesis.

On the basis of these studies two hypotheses for testing in this study were stated as follows:

1.0 Perceptions of role conflict and role ambiguity differ at selected occupational levels.

2.0 Perceptions of task characteristics differ at selected occupational levels.

In the research design adopted for this study three occupational levels were delineated, namely the clerical, professional and administrative occupational levels. Specific hypotheses suitable for testing were developed on the basis that differences exist between mean scores on two role dimensions and three task characteristics dimensions. The hypotheses stated that the highest mean scores on Role Ambiguity, Role Conflict and Task Autonomy would be found at the administrative level, and the lowest mean scores at the clerical level. The reverse situation was predicted for mean scores on Task Structure and Task Repetitiveness. These hypotheses are stated in full at the end of this chapter.

In addition, predictions were made that these three occupational levels would be associated with differences in relationships between leader behavior and the satisfaction of subordinates. These hypotheses are stated in the following sections relating Leader Directive Behavior, Leader Supportive Behavior, and Leader Participative Behavior to types of Satisfaction.

Role Perceptions

Kahn et al. (1964) discussed several studies relating to organizational stress and the dysfunctions of roles, using the concepts of role conflict and role ambiguity. Job-related tension was found to be related to role ambiguity, role conflict, rank and status in an organization. According to Schuler (1977:66), role conflict and ambiguity are generally associated with low performance and satisfaction, and high turnover, tension and anxiety.

In an attempt to deal with role conflict and ambiguity in a more empirical manner, Rizzo et al. (1970: 155-159) developed measures of these concepts based upon members' perceptions of sources of conflict and ambiguity within an organization. Four sources of role conflict for members of organizations were identified as (1) incompatibility between a member's internal standards or values and expected or defined behavior, (2) incongruency between the time and resources available and the behavior defined for a member, (3) conflicting expectations as a result of membership of several different work groups, and (4) conflicting requests, incompatible policies or varying standards of evaluation applied to members. Role ambiguity was stated to be reflected in (1) the degree of certainty about duties, authority, allocation of time and relationships with others, (2) the existence or specificity of guides, directives or policies, and (3) the ability to predict sanctions as outcomes of behavior. Thus the Role Conflict and Ambiguity Scales developed provided operational definitions of these constructs. These scales are further discussed in Chapter IV.

The importance of role conflict and ambiguity as critical variables in a model of organizational behavior was discussed by House and Rizzo (1972:467-505). Role conflict and ambiguity were studied as mediating variables in relationships between organizational and leadership practices, and (1) the satisfaction of subordinates, (2) perceived effectiveness, (3) anxiety and (4) propensity to leave. House and Rizzo (1972:503) concluded that the results demonstrated the mediating effects of role conflict and ambiguity and provided additional support for the Path-Goal Theory.

No hypotheses were developed in this study to test the relationships between the satisfaction of subordinates and role conflict as well as role ambiguity. Nevertheless, the relationships found were noted and used to interpret more adequately than otherwise possible findings connected with the satisfaction of subordinates. Research hypotheses were developed to test the association of role conflict and role ambiguity with moderation of relationships between leader behavior and types of satisfaction. These hypotheses are discussed in the following sections relating to leader behavior.

Task Characteristics

Pierce and Dunham (1976:83-97) reviewed the literature on task characteristics and concluded that task designs, that is, enriched and enlarged jobs are more frequently associated with positive affective, behavioral and motivational responses than are narrowly defined tasks. Some findings suggested that increased task variety is not necessarily associated with increases in satisfaction and motivation. However, affective responses appear to be more strongly associated with task design than are behavioral responses. In particular, Pierce and Dunham (1976:87) note that task design is more strongly related to satisfaction with work than to other affective, behavioral or motivational variables.

Hulin and Blood (1968:41-55) suggest that many ambiguities in research findings may be traced to a lack of agreement among researchers on the conceptualization and measurement of task design. House (House and Dessler, 1974: 38) acknowledges that his original tests of the Path-Goal Theory were somewhat weak, because the theoretical constructs concerning task characteristics were inferred rather than measured directly. Job autonomy was taken as an indicator of task ambiguity, and job scope as a variable leading to task satisfaction. Sims et al. (1976:197) state that the most widely known job characteristics scales are those developed by Turner and Lawrence (1965), later reviewed by Hackman and Lawler (1971:259-286). Six dimensions of job characteristics were described as variety, autonomy, task identity, feedback, dealing with others, and friendship opportunities. The first four dimensions were labelled "core dimensions" but the last two were not viewed as centrally related to job satisfaction, and therefore were not similarly labelled. Of these four core dimensions, two were chosen for incorporation into the research design of this study, namely, task variety and task autonomy. This choice is consistent with choices made in other tests of the Path-Goal Theory.

Task structure was an important situational factor in the development of Fiedler's (1967) Contingency Model of Leadership. Task structure meant the extent to which the leader can control the operation by subdividing and coordinating the work. Tasks which are highly structured, explicit, or programmed, provide a more favorable situation for the exertion of leader influence than tasks which are vague, nebulous and unstructured. Fiedler (1967:22-35) stated that task structure remains constant within specific types of organizations. However, this assertion does not appear to be reasonable with respect to perceptions of the task structure in a large urban school system. As stated in an earlier section of this chapter, research hypotheses were developed to test for differences among selected occupational levels.

The three task characteristics factors incorporated into the research design of this study, namely, Structure, Repetitiveness and Autonomy, were made operational in the Task Description Questionnaire developed by Stinson and Johnson (1975b:1-8). This instrument is further discussed in Chapter IV. Task Structure refers to the use of specific procedures in performing a task, whereas Task Repetitiveness indicates the degree to which these procedures are repeated. Task Autonomy describes the extent to which individuals are free to make their own decisions regarding task performance. Full definitions of these constructs are given in Chapter I.

Research hypotheses incorporating these task characteristics were developed on the basis of the studies and reviews cited in this section. These hypotheses predicted relationships between task characteristics and the satisfaction of subordinates. The major hypothesis was stated as follows:

> 3.0 The task characteristics dimensions, Task Structure, Task Repetitiveness and Task Autonomy are differentially related to subordinate satisfaction at selected occupational levels.

The specific hypotheses, stated in full at the end of this chapter, predict that Task Structure and Repetitiveness are negatively correlated with selected types of satisfaction, whereas Task Autonomy is positively correlated with these types of satisfaction.

In addition, research hypotheses were developed to test the association of Task Structure, Repetitiveness and Autonomy with moderation of relationships between leader behavior and types of satisfaction. These hypotheses are discussed in the following sections relating to leader behavior.

LEADER BEHAVIOR AND SUBORDINATE SATISFACTION

The two basic propositions of the Path-Goal Theory may be restated to incorporate only those contingency factors and facets of satisfaction chosen for investigation in this study. In Figure 2 on page 44, a summary statement of the path-goal relationships incorporating these variables is presented. These relationships and the modified basic propositions may be coalesced into one statement in the form of a general hypothesis as follows:

> The type (positive or negative) and degree of association between leader behaviors and the satisfaction of subordinates differs according to subordinates' perceptions of (1) role conflict and ambiguity and (2) the task characteristics, structure, repetitiveness and autonomy.

The selected role and task characteristics factors may be related to occupational levels in the school system under study by the statement of a second general hypothesis:

> Perceptions of role conflict and ambiguity and the task characteristics, task structure, repetitiveness and autonomy differ at selected occupational levels.

Three kinds of leader behavior were chosen for investigation in the school system under study, namely, directive, supportive and participative behavior. Specific hypotheses relating the satisfaction of subordinates to these three kinds of leader behavior may be derived from the two general hypotheses. The rationale for these specific hypotheses is developed in the following sections.

Directive Leader Behavior

House and Mitchell (1974:90) stated that leader directiveness is positively correlated with satisfaction of subordinates engaged in ambiguous tasks and negatively correlated with satisfaction of subordinates engaged in clear tasks. The Theory states that when role demands are ambiguous and in conflict, and when tasks are highly varied and unstructured, and when subordinates have autonomy in the performance of tasks, a leader behaving in a directive manner clarifies the paths that lead to goal accomplishment. Directive leader behavior was therefore predicted to be positively correlated with subordinate satisfaction. However, clear role demands, and structured and repetitious tasks that provide for little subordinate autonomy, do not require clarification of paths to goals for subordinates. Leader directive behavior in these circumstances is viewed more as unnecessarily close supervision. Directive behavior was therefore predicted to be negatively correlated with the satisfaction of subordinates in these circumstances.

Several studies have tested these predictions. Role ambiguity was found to moderate relationships between leader directive behavior and the satisfaction of subordinates in studies conducted by House (1971:328), Szilagyi and Sims (1974:630), and Sims and Szilagyi (1975:434). In addition, House (1971:335) found that job autonomy, which was taken as an indicator of task ambiguity, showed moderating effects. Dessler (House and Dessler, 1974:38-39) developed a task certainty measure to test these hypotheses, and found that task certainty, when interacting with subordinate authoritarianism, moderated relationships between directive behavior and the satisfaction of subordinates. House and Dessler (1974:53) used an improved version of this instrument, described as a task structure scale, to demonstrate support for these hypothesized relationships. Greene (1974:47) also found support for these hypotheses with respect to task structure.

In contrast to the studies cited above, other studies were not generally supportive of the hypothesis that leader directiveness is positively correlated with the satisfaction of subordinates engaged in ambiguous tasks and negatively correlated for subordinates engaged in clear tasks. Stinson and Johnson (1975a:247) found the opposite relationships to those hypothesized with respect to task structure and task repetitiveness. Moreover, task autonomy did not have any moderating effects. Downey et al. (1975:259) found that task structure did not moderate relationships between directive behavior and the satisfaction of subordinates. Four other unpublished studies cited by Schriesheim and Von Glinow (1977:400) reflect the qualified nature of support for the Path-Goal Theory hypotheses.

On the basis of these studies and the Path-Goal Theory predictions, a hypothesis was stated as follows:

> 4.0 Leader Directive Behavior is differentially related to subordinate satisfaction, contingent upon subordinate Role Conflict and Role Ambiguity, and the task characteristics dimensions, Task Structure, Task Repetitiveness, and Task Autonomy.

Specific hypotheses were derived from this hypothesis. Negative correlation coefficients between Leader Directive Behavior and the satisfaction of subordinates were predicted at the clerical occupational level, under conditions of low Role Ambiguity, Role Conflict, and Task Autonomy, and under high Task Repetitiveness and Task Structure conditions. Positive correlation coefficients were predicted for administrative and professional personnel and under the opposite role and task characteristics conditions. These specific hypotheses are given in detail at the end of this chapter.

Supportive Leader Behavior

According to Schriesheim and Von Glinow (1977:398), most research studies have tested the hypotheses that the lower the task structure of subordinates, the lower the relationship between supportive leader behavior and subordinate satisfaction. The Theory, as developed by

House and Mitchell (1974:91), hypothesizes that supportive leader behavior will have its most positive effect on the satisfaction of subordinates who work on stressful, frustrating tasks. According to House and Dessler (1974: 41), this hypothesis is based on the assumption that subordinates who are autonomous in the performance of tasks which are complex and varied, are likely to find the challenge of their job more intrinsically satisfying.

The moderating effects of task characteristics on relationships between supportive leader behavior and the satisfaction of subordinates have been tested in several studies. House (1971:337) found that increased job scope was accompanied by significantly reduced correlations between leader Consideration behavior and subordinate satisfaction. House and Dessler (1974:54) concluded that task structure moderated the relationships between supportive leadership and intrinsic satisfaction. Positive correlation coefficients between supportive leadership and intrinsic satisfaction were smaller in low task structure groups than in high task structure groups. Greene (1974:47) found task structure had a similar moderating effect. According to Stinson and Johnson (1975a:248), task repetitiveness and task structure moderated relationships between leader Consideration behavior and satisfaction as predicted by Path-Goal Theory, but only limited evidence was found that task autonomy moderated the relationships. However, Downey et al.

(1975:260) found no evidence that task structure moderated the relationships in the manner predicted. Nevertheless, the correlation between leader Consideration behavior and satisfaction with supervision was higher among machine operators than managers. Partial support was therefore indicated.

The effect of role ambiguity on the relationship between leader Consideration behavior and the satisfaction of subordinates was investigated by Szilagyi and Sims (1974:630), but no evidence of any moderating effect was found.

No indication of support for the Path-Goal hypothesis that supportive leader behavior will have its most positive effect on the satisfaction of subordinates who work on stressful, frustrating tasks was found by Downey and his coworkers, or Szilagyi and Sims. However, remarkably high correlation coefficients between leader Consideration behavior and all the facets of satisfaction investigated were reported.

On the basis of findings in the studies reviewed and Path-Goal Theory predictions, the following hypothesis was formulated:

> 5.0 Leader Supportive Behavior is differentially related to subordinate satisfaction, contingent upon subordinate Role Conflict and Ambiguity, and the task characteristics dimensions, Task Structure, Task Repetitiveness and Task Autonomy.

Specific hypotheses were derived from this hypothesis. These hypotheses predicted the highest positive correlations between Supportive Behavior at the clerical occupational level and under the following conditions: low Role Conflict and Ambiguity; low Task Autonomy; and high Task Repetitiveness and Task Structure. Lower positive correlations were predicted at the administrative and clerical levels and under the opposite role and task conditions. These specific hypotheses are given in detail at the end of this chapter.

Participative Leader Behavior

Mitchell (House and Mitchell, 1974:92) described four ways in which participative leader behavior would impact on subordinate attitudes and behavior. Participation would lead to (1) greater clarity of paths to goals; (2) an increase in the correspondence between organization and subordinate goals; (3) an increase in an individual's control over what happens on the job; and (4) an increase in ego-involvement in a decision. House and Dessler (1974:42) state that participative leadership is conceived of as a nondirective form of role-clarifying behavior analogous to directive leadership. This view of participative leadership implies that subordinates engaged in stressful, ambiguous tasks will be more satisfied with participative leadership than subordinates engaged in structured, clearly defined tasks. These relationships could be expected because it is under stressful, ambiguous task conditions that role-clarifying behavior is most needed.

House (House and Mitchell, 1974:93) reviewed several studies in which findings suggested that the relationship between participative leadership and satisfaction of subordinates appeared to be moderated by the personality characteristics of subordinates as well as situational factors. In an attempt to explain the findings in the studies reviewed, the earlier view of participative leadership as nondirective role-clarifying behavior was modified. Two hypotheses were formulated as follows:

> (1) When subjects are highly ego-involved in a decision or a task and the decision or task demands are ambiguous, participative leadership will have a positive effect on the satisfaction and motivation of a subordinate, regardless of the subordinate's predisposition toward self-control, authoritarianism or need for independence.
>
> (2) When subordinates are not ego-involved in their task and when task demands are clear, subordinates who are not authoritarian and who have high needs for independence and self-control will respond favorably to leader participation, and their opposite personality types will respond less favorably.

These hypotheses were tested by Schuler (1976:320-325) who found that participation is satisfying to low authoritarian subordinates regardless of the degree of repetitiveness in their tasks. However, participation is satisfying to highly authoritarian subordinates only under conditions of low task repetitiveness. Moreover, highly repetitive tasks are less conducive to ego-involvement than low repetitive tasks.

On the basis of the reviews cited and Path-Goal Theory predictions with respect to Leader Participative

Behavior, the following hypothesis was formulated:

> 6.0 Leader Participative Behavior is differentially related to subordinate satisfaction, contingent upon subordinate Role Conflict and Ambiguity and the task characteristics dimensions, Task Structure, Task Repetitiveness, and Task Autonomy.

Specific hypotheses were derived from this hypothesis on the basis of the findings discussed above. At the professional and administrative occupational levels tasks were expected to be unstructured and varied, and role demands ambiguous and in conflict, with the result that Participative Leader Behavior was predicted to be positively correlated with the satisfaction of subordinates. Likewise, those personnel in high Role Ambiguity and Conflict, high Task Autonomy, and low Task Repetitiveness and Structure groups were predicted to be more satisfied with participative leadership.

At the clerical level tasks were expected to be more repetitive, structured and less autonomous, and therefore also less ego-involving. The prediction was made that these personnel would respond favorably to Leader Participative Behavior. However, to take account of the possible interaction with personality factors when task demands are clear, additional hypotheses were developed.

House (House and Dessler, 1974:60) stated that role ambiguity, if looked at in the general sense as a personality variable, may be viewed as a "moderating vehicle." A specific hypothesis which predicted that, within the clerical occupational level, Leader

Participative Behavior will be more highly correlated with satisfaction in the high Role Ambiguity group than in the low Role Ambiguity group was formulated.

The specific hypotheses relating to Leader Participative Behavior are stated in full in the following section.

RESEARCH HYPOTHESES

In this chapter a summary of the relationships which comprise the Path-Goal Theory of Leadership was presented in Figure 1 on page 46. For the purposes of testing selected aspects of the Theory in the school system under study, a choice was made among these relationships and research hypotheses based upon this choice were formulated. In this section these hypotheses are presented together. Full statements of specific hypotheses developed from these hypotheses are also presented.

The two general hypotheses developed for testing in the school system are:

1. The type (positive or negative) and degree of association between leader behaviors and the satisfaction of subordinates differs according to subordinates' perceptions of (1) role conflict and ambiguity and (2) the task characteristics, structure, repetitiveness and autonomy.

2. Perceptions of role conflict and ambiguity and the task characteristics, task structure, repetitiveness and

autonomy differ at selected occupational levels.

Specific operational hypotheses suitable for testing were derived from these two general hypotheses. For clarity of presentation, operational hypotheses were stated to include within one statement, where appropriate, three scales measuring subordinate satisfaction. These scales were intrinsic satisfaction, extrinsic satisfaction and general satisfaction. As a consequence, three hypotheses were contained within each of these statements. Although three hypotheses were contained within each statement, the hypotheses were tested separately when the data were analyzed.

In addition, hypotheses were stated to include within one statement, where appropriate, the three occupational levels described as administrative, professional and clerical. Likewise, although three hypotheses were contained within each statement, the hypotheses were tested separately when the data were analyzed.

The specific operational hypotheses were grouped as follows:

(1) those arising out of the second general hypothesis;

(2) those which relate task characteristics dimensions to subordinate satisfaction; and

(3) those related to leader directive behavior, leader supportive behavior and leader participative behavior respectively.

Some of these specific operational hypotheses imply calculation of correlation coefficients. Discussion of the criteria which were used to assess the significance of a correlation coefficient occurs in Chapter IV.

Role Perceptions, Task Characteristics and Occupational Levels

1.0 Perceptions of role conflict and role ambiguity differ between selected occupational levels.

1.11 The Role Conflict mean is highest at the administrative level, lower at the professional level and lowest at the clerical level.

1.12 The Role Ambiguity mean is highest at the administrative level, lower at the professional level, and lowest at the clerical level.

2.0 Perceptions of task characteristics differ at selected occupational levels.

2.11 The Task Structure mean is lowest at the administrative level, higher at the professional level, and highest at the clerical level.

2.12 The Task Repetitiveness mean is lowest at the administrative level, higher at the professional level, and highest at the clerical level.

2.13 The Task Autonomy mean is highest at the administrative level, lower at the professional level, and lowest at the clerical level.

Task Characteristics and Satisfaction

3.0 The task characteristics dimensions, Task Structure, Task Repetitiveness and Task Autonomy are differentially related to subordinate satisfaction at selected occupational levels.

3.11 Task Structure is negatively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction at the clerical, professional and administrative levels.

3.12 Task Repetitiveness is negatively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction at the clerical, professional and administrative levels.

3.13 Task Autonomy is positively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction at the clerical, professional and administrative levels.

Leader Directive Behavior and Subordinate Satisfaction

4.0 Leader Directive Behavior is differentially related to subordinate satisfaction, contingent upon subordinate Role Conflict and Ambiguity and the task characteristics dimensions, Task Structure, Task Repetitiveness, and Task Autonomy.

4.11 Leader Directive Behavior is negatively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction at the clerical occupational level.

4.12 Leader Directive Behavior is positively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction at the professional and administrative occupational levels.

4.21 The positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction is highest at the administrative level, lower at the professional level, and lowest at the clerical level.

4.31 A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Role Conflict personnel group than in the low Role Conflict personnel group.

4.32 A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Role Ambiguity personnel group than in the low Role Ambiguity personnel group.

4.41 A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the low Task Structure personnel group than in the high Task Structure personnel group.

4.42 A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic

Satisfaction, and General Satisfaction occurs in the low Task Repetitiveness personnel group than in the high Task Repetitiveness personnel group.

4.43 A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Task Autonomy personnel group than in the low Task Autonomy personnel group.

Leader Supportive Behavior and Subordinate Satisfaction

5.0 Leader Supportive Behavior is differentially related to subordinate satisfaction, contingent upon subordinate Role Conflict and Ambiguity and the task characteristics dimensions, Task Structure, Task Repetitiveness, and Task Autonomy.

5.11 Leader Supportive Behavior is positively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction at the administrative, professional and clerical occupational levels.

5.21 The positive correlation between Leader Supportive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction is highest at the clerical level, lower at the professional level, and lowest at the administrative level.

5.31 A higher positive correlation between Leader Supportive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the low Role Conflict personnel group than in the high Role Conflict personnel group.

5.32 A higher positive correlation between Leader Supportive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the low Role Ambiguity personnel group than in the high Role Ambiguity personnel group.

5.41 A higher positive correlation between Leader Supportive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Task Structure personnel group than in the low Task Structure personnel group.

5.42 A higher positive correlation between Leader Supportive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Task Repetitiveness personnel group than in the low Task Repetitiveness personnel group.

5.43 A higher positive correlation between Leader Supportive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the low Task Autonomy personnel group than in the high Task Autonomy personnel group.

Leader Participative Behavior and Subordinate Satisfaction

6.0 Leader Participative Behavior is differentially related to subordinate satisfaction, contingent upon subordinate Role Conflict and Ambiguity and the task characteristics dimensions, Task Structure, Task Repetitiveness, and Task Autonomy.

6.11 Leader Participative Behavior is positively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction at the administrative, professional, and clerical occupational levels.

6.21 Within the clerical occupational level, a higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Role Ambiguity personnel group than in the low Role Ambiguity personnel group.

6.31 A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Role Conflict personnel group than in the low Role Conflict personnel group.

6.32 A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Role Ambiguity personnel group than in the low Role Ambiguity personnel group.

6.41 A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the low Task Structure personnel group than in the high Task Structure personnel group.

6.42 A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the low Task Repetitiveness personnel group than in the high Task Repetitiveness personnel group.

6.43 A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction occurs in the high Task Autonomy personnel group than in the low Task Autonomy personnel group.

CHAPTER IV

INSTRUMENTATION AND RESEARCH METHODOLOGY

In this chapter the instruments used to operationalize the leader behavior, role perception, task characteristics, and satisfaction dimensions are discussed. The delineation of three occupational levels named "administrative," "professional" and "clerical" from among all occupations encompassed in a large urban Canadian school system is also discussed. Procedures used to collect data from the administrative, professional and clerical system are briefly reported. The composition of the group of respondents at the three occupational levels is then analyzed according to job title in the school system. Finally, the data analysis procedures used in this study are discussed.

THE QUESTIONNAIRES

Four questionnaires were used to obtain data from school system personnel. These questionnaires were titled "The Leader Behavior Questionnaire," "The Task Description Questionnaire," "The Role Perception Questionnaire," and "The Minnesota Satisfaction Questionnaire." These questionnaires are discussed in the following sections of this chapter.

The Leader Behavior Questionnaire

The Leader Behavior Questionnaire used in this study was developed by House and Dessler (1974:46-47). The questionnaire comprised three leader behavior scales, namely, Instrumental, Supportive and Participative Leadership Scales. These leader behavior scales were constituted using factor analysis techniques. Three oblique factors were identified among the responses of personnel in an electronics firm to a pool of leader behavior items. As indicated in Chapter III, the Instrumental and Supportive Leadership Scales were similar to the LBDQ-XII Initiating Structure and Consideration Scales respectively. No items reflecting autocratic, punitive or participative leader behavior were included in these scales. However, the participative leader behavior items from the LBDQ Consideration Scale and items specifically developed by House and Dessler (1974:43) were included in the Participative Leadership Scale.

Schriesheim and Kerr (1974:764) concluded that the LBDQ-XII does not suffer from some of the serious shortcomings of the LBDQ and SBDQ instruments. The LBDQ-XII instrument has more acceptable content and concurrent validity as well as internal consistency and test-retest reliability than either the LBDQ or SBDQ instruments. For these reasons the House and Dessler Leader Behavior Questionnaire, which may be regarded as a more refined version of the LBDQ-XII, appeared to be a suitable instrument for use in testing aspects of the Path-Goal Theory of Leadership. Moreover, House and Dessler (1974:49) quoted scale reliabilities approaching 0.80 for their three leadership scales. In addition, Schriesheim and Von Glinow (1977:402) quoted reliabilities of 0.78 and 0.89 for the Instrumental and Supportive Leadership Scales.

For this study of school system personnel, Instrumental Leadership was renamed Leader Directive Behavior as described in Chapter III. The leader behavior items as listed by House and Dessler (1974:46-47) were rearranged randomly, and the LBDQ format, including response categories, was adopted. The questionnaire, as used in this study is presented in Appendix A.

The Task Description Questionnaire

An instrument comprising measures of perceived task characteristics was used by Stinson and Johnson (1975a: 242-252) to test Path-Goal Theory predictions. This instrument was the thirty-one item Task Description Questionnaire (TDQ) which comprised scales measuring Task Structure, Task Repetitiveness and Task Autonomy. Stinson and Johnson (1975b:1-8) subsequently revised the instrument by subjecting the responses from three separate sample populations to a principal components factor analysis with varimax rotation. Three criteria were used to select items used in each scale as follows: (1) a minimum factor loading of |.60| ; (2) a maximum factor loading of |.35| on any other scale; and (3) the items on each scale must be theoretically consistent. Five items were chosen for each scale. The TDQ was found to discriminate between subjects in two samples and between two subgroups in a third sample on each of the three task characteristics scales, suggesting that the TDQ possesses discriminant validity. Moreover, internal consistency reliabilities ranging from 0.71 to 0.90 for the three measures in three samples were quoted. These reliabilities are sufficiently high for research purposes.

A copy of the questionnaire is contained in Appendix A as part of the research instrument titled "A Set of Questionnaires." The only modification to the instrument made for this study was to rearrange items randomly to avoid pairs of items within the one scale occurring together. The items comprising the Task Autonomy Scale were numbered 1, 4, 6, 10 and 14, whereas items comprising the Task Repetitiveness Scale were numbered 2, 7, 8, 12 and 15. The remaining items comprised the Task Structure Scale.

The Role Perception Questionnaire

A thirty-item questionnaire was developed by Rizzo et al. (1970:155-156) to measure role ambiguity and role conflict. These items reflected the sources of role ambiguity and conflict for members in an organization, as described in Chapter III. House (1972:1) states that when the responses to these items were subjected to factor analysis, two factors emerged. This finding held true in seven separate samples. On the basis of factor analysis, six items were selected to constitute the Role Ambiguity Scale, and eight items were chosen to comprise the Role Conflict Scale from among the original thirty items. criteria for selection of items were (1) factor loadings were greater than |.30|, (2) cross loadings on the two factors were negligible, and (3) the internal consistency reliabilities on the two scales were high. The response scale developed by Rizzo et al. (1970:156) requested subjects to respond to each role item, indicating the degree to which the condition existed for him, on a seven point scale ranging from very false to very true.

Schuler et al. (1977:111-128) subjected the six-item Role Ambiguity Scale and the eight-item Role Conflict Scale to further analysis. The results of factor analysis of all the items in each of six samples indicate support for a two-factor solution to the role perceptions responses, namely, a Role Ambiguity and a Role Conflict factor. Moreover, internal consistency reliabilities ranging from 0.70 to 0.87 for the two scales were found in five of the six samples. On the basis of these and other analyses, Schuler et al. (1977:125) suggest that Role Conflict and Ambiguity are valid constructs in organizational behavior and recommend continued use of the scales.

A copy of the Role Perception Questionnaire which incorporates the Role Conflict and Ambiguity Scales is contained in Appendix A as part of the research instrument titled "A Set of Questionnaires." The Role Ambiguity Scale comprises items numbered 1, 3, 5, 8, 10 and 13. All other items comprise the Role Conflict Scale. The responses to the Role Ambiguity items were reflected and then summed to obtain a score on this scale.

The Minnesota Satisfaction Questionnaire

The Minnesota Satisfaction Questionnaire - Short Form (MSQ) was used in this study of school system personnel. Wanous and Lawler (1972:96) identify this instrument as one based upon the concept of satisfaction as need fulfillment. This approach is consistent with the Path-Goal Theory which views leader functions as fulfilling needs of subordinates by increasing personal rewards for work goal attainment.

The short form of the MSQ was derived from the long form of the instrument which was developed as a measure of satisfaction with a number of different aspects of the work environment. The items in the short form are those items which are most highly correlated with the twenty scales making up the larger form.

Weiss et al. (1967:22) examined the factor structure of the MSQ for several groups, including teachers, managers, nurses, secretaries, toy assemblers and packers, and found that two factors were most commonly extracted. The first factor accounted for 51 percent to 59 percent of the variance, depending on the occupational group. The factors were labelled Intrinsic and Extrinsic Satisfaction.

Weiss et al. (1967:23) concluded:

> the results of the factor analysis, in general, indicate that about half of the common MSQ scale score variance can be represented by an extrinsic satisfaction factor, defined by the two Supervision scales, Company Policies and Practices, Working Conditions, Advancement, Compensation and Security. The remaining scales define one or more intrinsic satisfaction factors, accounting for the other half of the common variance.

General satisfaction is scored by summing all twenty items on the MSQ short form. The MSQ short form may therefore be interpreted as a questionnaire instrument containing three satisfaction scales, namely, Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction. Since many of the propositions developed in the statement of the Path-Goal Theory of Leadership are stated in a form referring to these three factors, the MSQ short form appears to be suited for use in tests of the Theory.

In the MSQ short form, Johnson and Weiss (1971:26) stated that the respondent is directed to ask himself: On my present job this is how I feel about (the item) . . . . The response alternatives presented for each item range from Very Dissatisfied through Neither to Very Satisfied, and are scored from 1 to 5 respectively.

Johnson and Weiss (1971:26) stated that the MSQ short form differentiated among occupational groups in terms of level of satisfaction. High Hoyt reliability coefficients for the instrument were quoted, varying from 0.87 for assemblers and 0.92 for engineers. Weiss et al. (1967:22) stated that data obtained in their research lend support for the construct validity of the instrument. In summary, Foley (Buros, 1972:1494) stated that as a rough screener or classifier, the MSQ can be recommended.

A copy of the Questionnaire is contained in Appendix A as part of the research instrument titled "A Set of Questionnaires." Minor modifications to language in some items were made to make them more applicable to respondents in the school system under study. Items numbered 5, 6, 12, 13, 14 and 19 comprise the Extrinsic Satisfaction Scale. With the exception of items 17 and 18, the remaining items comprise the Intrinsic Satisfaction Scale. All twenty items comprise the General Satisfaction Scale.

A Pilot Test

The Set of Questionnaires were pilot tested for readability and to establish the length of time required for completion using graduate and clerical staff in the Department of Educational Administration at The University of Alberta. As a result, minor changes in instructions were made. The time required for completion met conditions required for approval to conduct the study in the chosen school system.

THE RESPONDENTS

A large, urban school system was chosen as the source of subjects for testing the applicability of Path-Goal Theory hypotheses. The system was chosen because of its proximity and size. A large system offers a variety of skills and occupational levels within the one organization. Choice of subjects from within the one organization helps to control for possible extraneous factors which may affect the findings of the study.

Individuals were chosen on the basis of their membership in selected occupational groups which were presumed to differ widely in perceptions of their roles and task characteristics. Initially, the decision was made to select central office personnel in preference to school personnel in accordance with the classification of all school system personnel developed at The University of Alberta. Within the central office personnel division of the classification, Holdaway (1971:29-33) delineated Administrative, Auxiliary and Support categories of personnel. The central office section of the classification of school system personnel is presented in Figure 3.

Holdaway (1973:2.6) included in the administrative category, among others, all school district central office personnel who:

CATEGORY	SUB-CATEGORY	DESIGNATED PERSONNEL
Administrative	Senior	Superintendent, Assistant Superintendents, Secretary-Treasurer.
	Intermediate	Directors, Administrative Assistants, Accountants.
	Supervisory	Subject Supervisors and Consultants.
	Service	Maintenance, Warehouse and Information Staff.
Auxiliary	Pupil-Oriented	Psychologists, Social Workers.
	Other	Programmers, Planners, Architects.
Support Staff	Clerical	Secretaries and Clerks.
	Plant Operation	Printers, Key Punch Operators, Switchboard Operators, Library Technicians.
	Other	Custodians.

FIGURE 3

A CLASSIFICATION OF CENTRAL OFFICE PERSONNEL

Adapted from Holdaway (1971:29-33).

1. Planned, organized, directed, coordinated and/or controlled the activities and personnel of the school systems providing Grades 1-12 education;
2. Made key organizational decisions;
3. Supervised the work of other personnel; and
4. Did not work directly with students.

In this study a fifth criterion was added. Only central office personnel who were certificated teachers were included in the administrative category. This addition had the effect of removing the service component from the administrative category, thereby achieving a greater homogeneity of personnel within the category. For the purposes of this study, this grouping of personnel was described as the "administrative occupational level."

The adaptation made to the auxiliary classification was to retain only the pupil-oriented auxiliary personnel and to rename this grouping the "professional occupational level." The name "professional" was adopted although not all personnel who may lay claim to this description were included. However, the name serves to distinguish this group from personnel included in the other selected occupational levels.

Several criteria were used to include personnel at the professional occupational level. First, professional staff were those described by Holdaway (1973:27) as personnel required to render direct personal services to children in a teaching-learning situation. Their tasks do not include significant interpersonal supervision of any staff. In an analogous manner, Szilagyi and Sims (1974: 625) included only nonsupervisory personnel in their classification of professional personnel in a medical center. Second, only those personnel who render direct personal services to individual children or children in very small groups were included. Third, only those personnel with responsibilities for children in more than one school were included. Finally, only personnel who are engaged in a single designated position were included at the professional occupational level. Utilization of these criteria had the effect of excluding all classroom teachers, staff such as guidance counsellors who are full-time in a school, and supervisory staff who may have similar interests to those included but who have administrative concerns. In this way a relatively homogeneous group of instructional personnel at the professional occupational level was delineated. However, although described as central office personnel, these persons were not necessarily located in the central administrative building.

The adaptation made to the Support category in the classification presented by Holdaway (1971:29-33) was to include only the secretarial and clerical personnel employed in the central office and to rename the grouping the "clerical occupational level." Personal secretaries of the Superintendent and Assistant/Associate Superintendents, and all secretaries classified in the highest grades who had significant supervisory responsibilities were excluded from the grouping.

Secretaries with general typing duties were included. Some technical services personnel were regarded as clerical personnel and were also included at this occupational level. In addition, only full-time, permanent employees were included at this level.

In situations where doubt existed about the inclusion of personnel, the issue was resolved by consulting with the appropriate senior school board officers.

DATA COLLECTION

This section describes the arrangements made to collect data from respondents and the characteristics of those who returned questionnaires.

Data Collection Procedures

Clerical personnel were assembled in the board room following the issuing of an invitation by the Director of Support Personnel to all staff who met the criteria for inclusion at the clerical occupational level. Seventy-six persons attended during the half hour prior to the lunch break on the selected day. The Director introduced the researcher, emphasized that staff were not being evaluated and then left the room. The researcher invited all staff to complete the set of questionnaires, drew attention to the instructions and emphasized the anonymity of the responses. Respondents required from ten to twenty-five minutes to complete all items. As the respondents handed in completed questionnaires, they were asked if they had checked completion of every item and then thanked for their participation.

Questionnaires were distributed to professional personnel in accordance with arrangements made with the Director and Supervisor of the unit in the school system within which all persons at the professional occupational level were found. An accompanying letter, countersigned by the Director and Supervisor, stated the purpose of the research, gave details of approval, noted that only analyzed data would be made available to the system, emphasized the anonymity of responses and gave details for the return of completed questionnaires. A follow-up letter was subsequently delivered personally to the secretaries of all professional staff, and their cooperation was gained in ensuring returns where necessary. During delivery of the follow-up letters, several informal interviews were held with professional staff who were available.

Certificated senior administrative staff who comprised the administrative occupational level were located in the Administration, Curriculum Services, Operations, Personnel, Pupil Services, and Research and Evaluation departments. Interviews were held with the heads of all these departments and subsequent to the granting of necessary approvals, questionnaires were distributed to the secretaries of all administrative staff included in the administrative group. An appropriate covering letter was distributed with the questionnaires and in addition, informal interviews were held with available staff when the opportunity occurred. Arrangements for the collection of completed questionnaires and the distribution of follow-up letters were made with the secretaries of administrative personnel.

The high degree of cooperation from the secretaries of administrative and professional personnel as well as the cooperation of the respondents contributed to the high response rates achieved. In the next sections details of positions held by the respondents are reported and the response rate is analyzed.

The Clerical Occupational Level

Sixty-nine of the seventy-six available persons returned questionnaires. Of those returned, two were incomplete and one return was made by a person in a higher grade than all others in the clerical group. With the exclusion of these three returns, the clerical occupational group comprised sixty-six persons.

In the school system under study, support personnel are classified into eighteen grades. The classification system, which is used for salary and promotional purposes is presented in Appendix B. The clerical personnel who comprise the clerical occupational level were drawn from the junior grades in this system, namely, grades five to nine inclusive. Table 1 presents in summary form a description of the staff included in the clerical occupational level according to the titles given in responses to the questionnaires.

TABLE 1

CLASSIFICATION OF PERSONNEL COMPRISING THE CLERICAL OCCUPATIONAL LEVEL (n=66)

Category	Class Name	Number in Level	Grade
Secretaries	Secretary	5	8 or 9
	Secretary I	6	8
	Secretary II	2	9
Clerks	Clerk	8	5 or 8
	Clerk I	9	5
	Clerk II	6	8
	Accounts Clerk I	3	5
	Clerk Typist	9	6
Other Clerical	Library Technician	3	8
	Aide	5	6
	Switchboard Operator	1	7
	Duplicating Operator	4	8
	Keypunch Operator	5	9

The Professional Occupational Level

Thirty-eight of the fifty-one persons to whom a questionnaire was distributed returned questionnaires, but two of these were incomplete and therefore unusable. Table 2 presents in summary form a description by job title of the thirty-six personnel comprising the professional occupational level. Five persons did not state whether they were a psychologist, social worker, reading specialist or a speech therapist.

TABLE 2

CLASSIFICATION OF PERSONNEL COMPRISING THE PROFESSIONAL OCCUPATIONAL LEVEL (n=36)

Class Name	Number Available	Number in Level
Psychologist	14	8
Social Worker	11	5
Reading Specialist	12	9
Speech Therapist	14	9
One of the above	--	5
Total	51	36

The Administrative Occupational Level

Delivery of questionnaires was made to fifty-five persons who met the criteria for inclusion at the administrative occupational level. Forty-nine persons returned questionnaires but two were incomplete. Therefore the administrative occupational group in this study comprised forty-seven persons, as shown in Table 3.

Completed questionnaires from the clerical, professional and administrative occupational levels were coded and the data were punched on to computer cards.

TABLE 3

CLASSIFICATION OF PERSONNEL COMPRISING THE ADMINISTRATIVE OCCUPATIONAL LEVEL (n=47)

Class Name	Number Available	Number in Level
Assistant/Associate Superintendents	6	5
Directors	16	14
Supervisors	33	28
Total	55	47

Questionnaire Response Rates

Hopkins (1976:148) stated that an accepted practice when figuring the rate of return is to reduce the potential sample size by the number of undeliverables and figure the percentage by dividing the number of returns by the net sample size. Using this procedure, the overall response rate was calculated to be eighty-six percent. The rates of return for each occupational group were 91 percent for the clerical, 75 percent for the professional, and 89 percent for the administrative occupational levels.

Kerlinger (1964:397) stated that the use of the mail questionnaire in research has two defects. These defects are a possible lack of responses and an inability to check the responses given. The first of these defects is serious enough to bring into question the use of the mail questionnaire, since valid generalizations cannot be made from low returns. The key issue is what constitutes an adequate percentage of returns. Hopkins (1976:147) stated that fifty percent is adequate for analysis and reporting, sixty percent is good, and seventy percent is very good. However, Kerlinger (1964:397) stated that every effort should be made to obtain returns of at least eighty to ninety percent or more, and lacking such returns, to learn something of the characteristics of the nonrespondents.

In this study, response rates of approximately ninety percent at the administrative and clerical levels suggested that these returns were free of response bias. The lower rate of return at the professional level seemed to be due to a school system cost-effectiveness evaluation of the work of these personnel. Information to this effect was gained in an interview with two of the four nonrespondents in one of the twelve teams of professional personnel. Fears existed that data from this study were either linked to the evaluation or could be linked to the evaluation. This interpretation was supported by two other people in independent interviews.

Hopkins (1976:148) stated that if there is a question of response bias, a comparison of answers gained from early respondents with those from late respondents can be made. The assumption in this procedure, is that the responses of the very late returns will be much like the responses of the nonrespondents. When the responses of the fifteen people who returned questionnaires immediately were compared to the eleven responses received subsequent to the execution of follow-up procedures, no substantial differences in mean scores on role and task characteristics scales were found, except for the Role Conflict Scale. The higher role conflict mean score for the late group may have been expected in view of the possible explanation given for nil returns. Nevertheless, the conclusion drawn, taking into account the 75 percent return, was that the response bias at the professional level was minimal.

DATA ANALYSIS PROCEDURES

In this section four major issues are discussed, namely, the level of data analysis, statistical and nonstatistical significance, the choice of correlation coefficients and the method of grouping respondents.

Individual versus Group Emphasis

Schriesheim et al. (1976:315) state that the first studies utilizing the Ohio State University leader behavior scales used data analysis procedures employing the work unit or work group as the basis for analysis. Descriptions of leader behavior given by subordinates in a work group were averaged to obtain a leader behavior score considered more reliable and meaningful than individual responses. The assumption in this procedure is that the behavior of the leader is reasonably constant for all members of the work group. Most recent studies using leader behavior scales have rejected this assumption since averaging scores seems to create a fictitious measure of leader behavior which the leader never displays. Instead of the averaging method which emphasizes the work group as the unit of analysis, the focus has changed to relationships between the leader and individual subordinates. The change of focus to an individual subordinate's perception of leader behavior rather than an averaged work group's perception of leader behavior represents a change from the group level of data analysis to the individual level of data analysis.

According to Osborn (House and Dessler, 1974:58), the Path-Goal Theory of Leadership is applicable only at the individual level of analysis. As a consequence of this observation, descriptions of the behavior of leaders of personnel comprising various work groups or organizational levels are not averaged. Instead, an individual subordinate's perception of his or her leader's behavior was used as the basis for all relevant data analyses. The total number of individuals from whom data were obtained was 149, and therefore N = 149 in this study of school system personnel.

Meaningful, Important and Substantial Differences

No inferential procedures were employed in the data analysis in this study. Popham and Sirotnik (1973:41) stated that:

> inferential procedures are only valid where (1) there is a target population to which the inferences can be made and (2) appropriate random sampling and/or assignment procedures have been employed.

The 149 individuals used in this study represented the number of individuals who returned completed questionnaires from among all the personnel available at the selected occupational levels in the school system. In this situation, no claim could be made that the 149 individuals are a random sample or that there is a target population to which inferences could be made. Under these circumstances, Bakan (1967:13-14) stated that using the p value, or in any way even hinting at the statistical inference model, is completely indefensible.

The statement of most of the hypotheses formulated for testing in this study required the calculation and comparison of correlation coefficients. The question to be answered was whether or not the differences were significant in the nonstatistical sense. This question was expressed by Cormier (1971:34) as whether or not the differences could be described as "meaningful," "important" or "substantive." In referring to differences between correlation coefficients when hypotheses in this study were investigated, these terms were used except that the term "substantial" was preferred to "substantive."

The decision about what constitutes a meaningful, important or substantial correlation, or a meaningful difference in correlation coefficients, was an arbitrary decision. Separate judgments were made about whether or not to accept or reject the hypotheses formulated. However, three general guidelines were used to make these judgments. First, a correlation coefficient of value r = |0.40| or higher was accepted before the association between the two factors was said to be substantial. Second, when individuals grouped by occupational level or by scores on the contingency factors were compared, correlation coefficients were required to be higher or lower, and positive or negative as predicted. Finally, when groups were compared, differences of twenty percent or more in the proportion of predictable variance between the relevant leader behavior factor and satisfaction factor were deemed suitable in order to accept the hypotheses. For example, if the correlation coefficient between Leader Directive Behavior and Extrinsic Satisfaction was r = 0.6 in Group A and r = 0.3 in Group B, the difference in the proportion of predictable variance is twenty-seven percent, that is, the difference is substantial.

Partial Correlation Coefficients

Another important data analysis procedure which required resolution was the choice of correlation coefficients to be used in this study. House and Dessler (1974:54-55) state that their tests of the Path-Goal Theory showed that leader behavior measures are not likely to be independent of each other. Kerr et al. (1974:63) also state that researchers have found that leader Consideration behavior is not independent of Initiating Structure. Spurious findings could be drawn from a failure to account for the covariance between various measures of leader behavior. House and Dessler (1974:55) concluded that:

> failure to hold such covariance constant confounds the opposite effects of instrumental leadership and supportive leadership and masks specific variance associated with these leader behavior dimensions.

For these reasons partial correlation coefficients which control for the effects of leader behavior dimensions not under test were calculated. Pearson product-moment correlation coefficients were calculated and reported but partial correlation coefficients were used when testing the hypotheses relating to leader behavior. In cases where hypotheses did not involve leader behavior dimensions, Pearson product-moment correlation coefficients were utilized for testing purposes.

Grouping Respondents

An additional data analysis procedural problem which required solution was the method of grouping individuals for testing of the hypotheses developed. Hypotheses were developed to test for differences among the occupational levels from which the individual respondents were drawn. However, several hypotheses required the grouping of respondents according to scores on contingency factors. House and Dessler (1974:45) divided respondents into three equal groups according to scores on a Task Structure Scale, and therefore a similar procedure was adopted for this study. Respondents were divided into three approximately equal groups, first according to their scores on the Role Conflict Scale, and then successively according to their scores on the Role Ambiguity, Task Structure, Task Repetitiveness and Task Autonomy Scales. The hypotheses developed for this study made predictions about high and low scoring groups on each of these scales, but correlation coefficients for the medium scoring groups were also reported.

The following chapters report in detail the analyses conducted and the results of the tests of the hypotheses.

SUMMARY

In this chapter, the instruments used to measure leader behavior, task characteristics, role perceptions and satisfaction dimensions were discussed. The instruments chosen as most appropriate for testing the Path-Goal Theory of Leadership were (1) the Leader Behavior Questionnaire developed by House and Dessler (1974:46-47), (2) the Task Description Questionnaire developed by Stinson and Johnson (1975b:1-8), (3) the Role Perception Questionnaire developed by Rizzo et al. (1970:155-156), and (4) the Minnesota Satisfaction Questionnaire developed by Weiss et al. (1967:22-24). The quoted reliabilities as well as tests of validity suggested that the instruments were suitable for use in this study.

Data were collected from individuals within three occupational levels in a large urban school system. The administrative occupational level comprised supervisors, directors and assistant/associate superintendents located in the central office. The professional occupational level comprised reading specialists, psychologists, social workers and speech therapists. These persons were located in the central office and in nine school locations throughout the city. The third level, the clerical occupational level, comprised junior secretaries, clerks, clerk-typists and some technical services personnel located in the central office. The total number of respondents was 149.

General guidelines were arbitrarily decided upon to determine what differences were meaningful, important and substantial in the data analyses conducted in this study. For comparative purposes the respondents in the study were grouped according to occupational level and also in three approximately equal groups according to scores on Role and Task Description Scales. Because the leader behavior dimensions were correlated, partial correlation coefficients between leader behavior and satisfaction factors were calculated in order to make comparisons between different groupings of the respondents.

CHAPTER V

LEADER BEHAVIOR IN A SCHOOL SYSTEM

In this chapter the results of using factor analysis techniques on the responses of 149 school system personnel to the Leader Behavior Questionnaire are reported and discussed. The interrelationships between the leader behavior factors obtained are also reported. Finally, the relationships between the leader behavior factors which appeared in the factor solution adopted for subsequent analyses, and the leader behavior factors incorporated into the research design in Chapter III are discussed.

FACTOR ANALYSIS

The responses of school system personnel to the Leader Behavior Questionnaire are reported as percentage frequencies at the clerical, professional and administrative levels in Tables 42, 43 and 44 respectively in Appendix C. These responses were subjected to factor analysis for two reasons. First, the stability of the factor solution as reported by House and Dessler (1974:46-47) seemed to require substantiation. The oblique factor solution adopted by House and Dessler indicated that the leader behavior factors are not independent, and therefore leader behavior items are more likely to load on different factors when a new sample is tested. The leadership scales were developed on the basis of a three-factor oblique solution of responses from a sample employed in a medium-sized electronics firm. School system personnel employed in the public domain are likely to interpret items in the same leadership scales in a different manner, and therefore the House and Dessler factor solution may be unstable. Second, irrespective of the sample or population used, leader behavior factors do not seem to be independent. Kerr et al. (1974:63) reviewed several studies which showed that the supposedly independent factors, Consideration and Initiating Structure, may be negatively correlated. The possibility that correlated leader behavior factors may exist in the responses from school system personnel therefore required investigation.

Factor analyses of the responses to the Leader Behavior Questionnaire in this study were conducted, using the programs developed by the Division of Educational Research Services at The University of Alberta. The following sections report and discuss these analyses.

A Varimax Solution

Initially, a principal axis factor analysis of responses to the Leader Behavior Questionnaire was performed, followed by rotation using the varimax criterion which centers on simplifying the columns in a factor matrix. The purpose of the rotation is to obtain some theoretically meaningful factors and, if possible, to achieve a simple factor structure.

When the principal axis factor analysis was performed, three eigen values greater than one were obtained. Nie et al. (1975:477) state that the eigen value is a measure of the relative importance of a factor in terms of the amount of total variance accounted for in the data. There is no fixed rule for deciding what amount of variance is too small. In this study, the acceptable eigen value was arbitrarily set at one or greater than one and accordingly three factors were rotated to obtain the varimax solution.

The varimax solution obtained in this study is presented in Table 54 in Appendix D. The item numbers correspond to the items as numbered in the Leader Behavior Questionnaire in Appendix A. Discrete loadings greater than |.40| were obtained for all items on the three factors. However, nine of the twenty-two items loaded greater than |.40| on two factors, and therefore an oblique rotation to obtain simple structure was required. Oblique rotation is a similar procedure to that used by House and Dessler (1974:43) in order to obtain simple structure as the basis for developing the Leader Behavior Questionnaire.

A Factor-Matched Solution

Hurley and Cattell (1962:258) argue that rotation may serve to discover new structure in new data or to test hypotheses by seeing how well the factor patterns obtainable from a given set of data fit predicted factor patterns. Factor matching in the latter sense was a key concern in this study of school system personnel. The question to be addressed was whether the factor pattern underlying school system data was similar to that obtained by House and Dessler (1974:46-47), since the hypotheses formulated for testing were based upon leadership scales developed from the House and Dessler factor solution.

Table 55 in Appendix D reports the oblique factor solution of leader behavior items obtained by House and Dessler. The item numbers correspond with the items as numbered in the Leader Behavior Questionnaire presented in Appendix A. For clarity of presentation, the items with factor loadings greater than |.40| are boxed, thus indicating which items comprised the Instrumental, Supportive and Participative Leadership Scales. Item 2, not boxed, was included in the Supportive Leadership Scale.

In the factor-matching procedure used, the factor pattern presented in Table 55 became the target matrix for an oblique rotation. The varimax solution derived from school system data, presented in Table 54, was rotated towards this target matrix using the Oblique Procrustes factor analysis technique developed by Hurley and Cattell. In this way, an oblique factor-matched solution for school system data was obtained. This factor-matched solution is presented in Table 56 in Appendix D.

According to Hurley and Cattell (1962:261) there is no statistical test of the "goodness of fit" that could have been used when the factor-matched solution for school system data was compared to the House and Dessler solution. Other criteria had to be used to decide whether the factor-matched solution was acceptable and appropriate for use in subsequent data analysis. Nie et al. (1975:472) state that:

> . . . there are many statistically equivalent ways to define the underlying dimensions in the same set of data. This indeterminacy in a factor solution is in a way unfortunate because there is no unique and generally accepted best solution. On the other hand, not all the statistical factor solutions are equally meaningful in theoretical terms.

The factor solution chosen is therefore the one which best satisfies the theoretical needs of the research problem.

The decision to reject the oblique factor-matched solution for school system data was made following consideration of two issues. First, the relationship between the varimax solution for school system data and the oblique solution obtained by House and Dessler was examined. Second, the grouping of leader behavior items indicated by the oblique factor-matched solution was analyzed.

The relationship between the varimax solution of school system data (see Table 54 in Appendix D) and the oblique solution obtained by House and Dessler (see Table 55) can be gauged from the normalized transformation matrix used to obtain the factor-matched solution. This matrix is reported in Table 4. The transformation matrix indicates that there is a close similarity between House and Dessler's Instrumental Leadership and the third factor in the varimax solution. Supportive Leadership bears some resemblance to the second factor in the varimax solution, although a comparison of Tables 54 and 55 in Appendix D shows that factor loadings are in opposite directions. House and Dessler's Participative Leadership appears to resemble the first and second factors in the varimax solution to some extent, and the third factor to a lesser extent. These data indicated that the two factor patterns were not substantially related to one another.

TABLE 4

NORMALIZED TRANSFORMATION MATRIX USED FOR MATCHING THE SCHOOL SYSTEM VARIMAX SOLUTION (TABLE 54) TO THE HOUSE AND DESSLER OBLIQUE SOLUTION (TABLE 55) FOR THE LEADER BEHAVIOR QUESTIONNAIRE

Varimax Factor Solution: School System Data (N=149)	Oblique Factor Solution Obtained by House and Dessler (N=198)		
	Factor I Instrumental	Factor II Supportive	Factor III Participative
Factor I	-.22	-.16	.61
Factor II	.33	-.86	-.67
Factor III	.92	.49	.42

The second consideration with regard to the decision to reject the factor-matched solution involved examination of the proportion of variance contributed by each item in the Leader Behavior Questionnaire to the amount of variance accounted for by each factor. Four items contributed more than ten percent to the variance of computed Factor II, namely, Items 2 (11.4%), 3 (11.6%), 15 (11.0%) and 18 (10.4%).

In the oblique solution obtained by House and Dessler and reported in Table 55 in Appendix D, Item 2 "He keeps to himself," loaded in the same direction as all other items in the Supportive Leadership Scale. However, in the varimax solution this item loaded in the opposite direction. The likely explanation, suggested by one respondent who volunteered detailed comments on this item, was that in the supportive sense the item appears to refer to noninterfering behavior. The alternative interpretation, offered by the respondent who checked the item in the way consistent with most others, was that it referred to maintenance of social distance, that is, behavior consistent with directive or autocratic leadership.

Item 3 in the Leader Behavior Questionnaire states, "He lets group members know what is expected of them;" Item 15 states, "He does little things to make it pleasant to be a member of the group;" and Item 18 states, "He asks that group members follow standard rules and regulations." These three items, when considered together with Item 2, did not seem to be conceptually identical. Nor did the items seem to reflect the supposedly matched leader behavior factor, Supportive Leadership, as described by House and Dessler (1974:43). Although similar problems were not encountered in considering Factors I and III in the factor-matched solution for school system data, the problem with Factor II suggested the match with the House and Dessler solution was not a good one.

These considerations, taken together with the mathematical manipulations of the varimax solution required to match Factors II and III in the House and Dessler solution, as shown in Table 4, led to the rejection of the factor-matched solution. On theoretical grounds, the conclusion was drawn that the underlying factor structure derived from the responses of school system personnel did not match the factor solution obtained by House and Dessler. Hurley and Cattell (1962:260) warn that:

> If an investigator is satisfied--as many are--to announce that the fit is good, from visual judgment, then [the Oblique Procrustes factor-matching] program lends itself to the brutal feat of making almost any data fit almost any hypothesis!

This warning was heeded in this study.

An Alternative Oblique Solution

Following the rejection of the oblique factor-matched solution, an alternative oblique rotation was performed on the three-factor varimax solution. This rotation had the effect of simplifying the factor structure, and was also consistent with the factor analysis procedure used by House and Dessler. The oblique factor solution adopted for this study is given in Table 5. The item numbers listed correspond to the numbers used in the Leader Behavior Questionnaire found in Appendix A. All items loaded greater than |.40| on one of the three factors, and only one item loaded greater than |.40| on two factors.

The adoption of an oblique solution meant that the factors obtained were not independent and the reference axes were not orthogonal. Table 6 shows the correlation coefficients between the reference axes for the oblique factor solution of school system data reported in Table 5.

TABLE 6

INTERCORRELATION BETWEEN REFERENCE AXES IN THE OBLIQUE FACTOR SOLUTION OF SCHOOL SYSTEM LEADER BEHAVIOR RESPONSES (N=149)

Reference Axes	1	2
1	---	
2	-.63	---
3	.16	-.17

Labelling the Factors

Items which loaded greater than |.60| on the three factors obtained in the oblique factor solution reported in Table 5 were examined to determine what theoretically meaningful underlying dimensions are represented by the

TABLE 5

OBLIQUE FACTOR SOLUTION OF SCHOOL SYSTEM PERSONNEL RESPONSES TO LEADER BEHAVIOR QUESTIONNAIRE ITEMS (N=149)

Item Number	Leader Behavior Factors			Communalities
	I Participative	II Achievement-Oriented	III Directive	
1	-.21	.82	.37	.70
2	-.25	-.47	.13	.45
3	-.12	.82	.19	.62
4	.66	.20	-.17	.68
5	.17	.66	.14	.64
6	.81	.00	.04	.66
7	.53	.34	-.13	.63
8	.56	.38	.04	.71
9	.67	.12	-.01	.57
10	.02	.37	.73	.72
11	-.02	.72	.33	.65
12	1.00	-.31	.21	.72
13	.19	.57	.30	.60
14	-.12	.29	.74	.66
15	.46	.41	-.17	.64
16	.54	.32	-.14	.62
17	.92	-.22	.36	.71
18	.15	.05	.73	.56
19	.94	-.19	-.04	.71
20	.61	.21	-.19	.63
21	.75	.00	.04	.57
22	.64	.16	-.07	.57
% Total Variance	33.0	19.6	11.0	
% Common Variance	51.9	30.8	17.0	

Note: Factor loadings in boxes are greater than |.40|.

factors. The criterion of a factor loading of |.60| was chosen to emphasize the major elements contained within each factor. Table 7 shows the grouping of items obtained within each factor and, for comparative purposes, the way the item was grouped in the leadership scales developed by House and Dessler. The item numbers correspond to the numbers used in the Leader Behavior Questionnaire.

All five items from the Participative Leadership Scale developed by House and Dessler (1974:47) loaded on Factor I together with several items from the Supportive Leadership Scale. The items which loaded highest were the Participative Leadership Scale items. In particular, Item 12 which states that, "Before taking action he consults with subordinates," made the highest contribution to the variance in leader behavior accounted for by Factor I. The four items drawn from the Supportive Leadership Scale which loaded on Factor I are all consistent with the kind of leader behavior necessary to allow consultation to occur before taking action. For these reasons the decision was made to label Factor I as "Leader Participative Behavior."

The items which loaded highest on Factor II (see Tables 5 and 7) were drawn from the Instrumental Leadership Scale and the Supportive Leadership Scale developed by House and Dessler (1974:46). The majority of items were drawn from the Instrumental Leadership Scale. These items described a leader who establishes definite and presumably challenging goals and performance standards, but who also

TABLE 7

LEADER BEHAVIOR ITEMS LOADING GREATER THAN |.60| IN THE OBLIQUE FACTOR SOLUTION FOR SCHOOL SYSTEM PERSONNEL (N=149)

Oblique Factors	Item Number	Item	House and Dessler Scales
I Leader Participative Behavior	4	He is friendly and approachable.	Supportive
	6	Before making decisions he gives serious consideration to what his subordinates have to say.	Participative
	9	He puts suggestions made by the group into operation.	Supportive
	12	Before taking action he consults with subordinates.	Participative
	17	When faced with a problem he consults with subordinates.	Participative
	19	He asks subordinates for their suggestions concerning how to carry out assignments.	Participative
	20	He treats all group members as equals.	Supportive
	21	He asks subordinates for suggestions on what assignments should be made.	Participative
	22	He is willing to make changes.	Supportive
II Leader Achievement-Oriented Behavior	1	He explains the way my tasks should be carried out.	Instrumental
	3	He lets group members know what is expected of them.	Instrumental
	5	He helps me overcome problems which stop me carrying out my task.	Supportive
	11	He maintains definite standards of performance.	Instrumental
III Leader Directive Behavior	10	He schedules the work to be done.	Instrumental
	14	He decides what shall be done and how it shall be done.	Instrumental
	18	He asks that group members follow standard rules and regulations.	Instrumental

encourages and assists subordinates to reach those goals and standards. Conceptually, this factor appears to represent leader behavior similar to that described by House and Mitchell (1974:83) as "achievement-oriented" behavior. An achievement-oriented leader constantly emphasizes excellence in performance and at the same time displays confidence that high standards of performance will be met. The decision was therefore made to label Factor II "Leader Achievement-Oriented Behavior."

The items which loaded highest on Factor III (see Tables 5 and 7) were all drawn from the Scale described by House and Dessler (1974:43) as Instrumental Leadership and from the LBDQ-XII Initiating Structure Scale. These items described leader behavior which designated and scheduled work to be done, and determined the procedure for completion. The most appropriate label for this factor appeared to "Leader Directive Behavior."

RESEARCH HYPOTHESES AND SCHOOL SYSTEM LEADER BEHAVIOR FACTORS

The leader behavior factors, Directive Behavior, Supportive Behavior and Participative Behavior referred to in the research hypotheses formulated for testing in this study have been operationalized in different ways in tests of the Path-Goal Theory of Leadership. However, the Leader Behavior Questionnaire used in this study was the same as that developed by House and Dessler (1974:46-47), and the way in which these leader behavior factors were operationalized was therefore expected to be the same as well. This was not the case because the oblique factors derived from the responses of school system personnel did not match those reported by House and Dessler. For this reason different operationalizations of the leader behavior factors were developed. A key issue to be addressed was whether these differing operationalizations allowed the research hypotheses, as put forward, to be tested. This issue is discussed in the next sections.

The Leader Directive Behavior Hypotheses

The factor derived from analysis of school system data that was labelled Leader Directive Behavior was conceptually similar to, though not identical with, Directive Leadership as defined by House and Mitchell (1974:83) and Instrumental Leadership as defined by House and Dessler (1974:43). Moreover, Items 10, 14 and 18 which loaded highest on the Leader Directive Behavior Factor in the factor solution of school system data (see Table 5), were three of the four items which loaded highest on House and Dessler's Instrumental Leadership Factor (see Table 55 in Appendix D). For these reasons, a leader behavior scale based upon factor loadings on Leader Directive Behavior was accepted as an appropriate way of operationalizing this factor, as distinct from the way in which it was operationalized by House and Dessler. Tests of research hypotheses based upon the operationalization of Leader Directive Behavior unique to this study were regarded as valid tests for school system personnel.

The Leader Supportive Behavior Hypotheses

The oblique factor solution for the Leader Behavior Questionnaire data obtained from school system personnel yielded no factors which could have been described as Supportive Leader Behavior. Most of the items comprising the Supportive Leadership Scale developed by House and Dessler loaded highly on Factor I, Leader Participative Behavior, but a few items also loaded highly on Factor II, Leader Achievement-Oriented Behavior (see Tables 5 and 7). In view of these circumstances, the conclusion was drawn that the hypotheses relating to Leader Supportive Behavior could not be tested.

The Leader Participative Behavior Hypotheses

The factor labelled Leader Participative Behavior was conceptually similar to, though not identical with, Participative Leadership as defined by House and Dessler (1974:43). Moreover, Items 6, 12, 17, 19 and 21 which loaded highest on Factor I in the factor solution of school system data (see Table 5) were the five items comprising House and Dessler's Participative Leadership Scale (see Table 55 in Appendix D). For these reasons, a leader behavior scale based upon loadings on Factor I, Leader Participative Behavior, was accepted as an alternative way of operationalizing the factor. Consequently, tests of research hypotheses based upon the operationalization of Leader Participative Behavior unique to this study were regarded as valid tests for school system personnel.

Leader Achievement-Oriented Behavior

The second factor which emerged from the oblique solution of school system personnel responses to the Leader Behavior Questionnaire was labelled Leader Achievement-Oriented Behavior. However, no hypotheses had been developed to test the association of Leader Achievement-Oriented Behavior with the satisfaction of subordinates, and therefore tentative hypotheses for subsequent testing were proposed. The loadings on Factor II formed the basis of a leader behavior scale operationalizing the factor, Leader Achievement-Oriented Behavior.

FACTOR SCORES

The leader behavior scale used to operationalize Leader Participative Behavior comprised all twenty-two items on the Leader Behavior Questionnaire. The same items were also used to obtain measures of the factors, Leader Achievement-Oriented Behavior and Leader Directive Behavior. The difference between the scales was reflected in the differing weights attributed to each item according to the leader behavior factor for which a measure was sought. The weighting of each item in the respective scales was represented by the factor loadings obtained in the oblique factor solution of school system leader behavior data. Scores calculated using weightings as described, that is factor scores, were obtained for each respondent on each of the factors delineated. These factor scores were used to calculate the product-moment and partial correlation coefficients used for testing hypotheses developed for this study.

The use of all twenty-two items in the calculation of factor scores, described by Nie et al. (1975:488) as "the complete estimation method," has some advantages. Selection of only those items which have substantial loadings does not control for the influence of items not included in the scale construction. Items not included affect the scale through their intercorrelations with items in the scale. In the complete estimation method some items act as suppressors to give the best estimate of a given factor.

INTERCORRELATION OF LEADER BEHAVIOR FACTORS

The adoption of an oblique factor solution meant that the leader behavior factors were not independent. Table 8 shows the product-moment correlation coefficients between the labelled factors at the three occupational levels used in this study. Since the leader behavior factors were correlated with one another, and correlated to a differing extent at each level, the decision was made to calculate partial correlation coefficients between leader behavior factors and other variables under test in this study. For example, when calculation of the correlation coefficient between Leader Participative Behavior and the Intrinsic Satisfaction of clerical personnel was required, the influence of the correlated leader behaviors, Achievement-Oriented Behavior and Directive Behavior on the relationship was held constant. In this way a single measure of association describing the relationship between Leader Participative Behavior and Intrinsic Satisfaction was obtained, while adjusting for the effects of two additional leader behavior factors.

TABLE 8

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN LEADER BEHAVIOR FACTORS AT SELECTED OCCUPATIONAL LEVELS (N=149)

Leader Behavior	Administrative Level (n=47)		Professional Level (n=36)		Clerical Level (n=66)	
	I	II	I	II	I	II
I Participative	---		---		---	
II Achievement-Oriented	-.49	---	-.55	---	-.66	---
III Directive	-.07	-.13	.12	-.17	.56	-.46

SUMMARY

When a principal axis factor analysis of responses to the Leader Behavior Questionnaire was performed, three eigen values greater than one were obtained. Three factors were therefore rotated according to the varimax criterion, but this technique did not yield a simple factor structure. The varimax solution was then rotated in an attempt to match the oblique factor solution for the Leader Behavior Questionnaire reported by House and Dessler, but no substantial match of factor matrix patterns was found. An alternative oblique factor solution which yielded a simple factor structure in the school system data was adopted. The three leader behavior factors were labelled Participative Behavior, Achievement-Oriented Behavior and Directive Behavior. As a consequence of the emergence of these three factors, research hypotheses predicting specified relationships with Leader Supportive Behavior could not be tested. Leader Directive Behavior and Leader Participative Behavior research hypotheses could be tested, but the leader behavior scales used to operationalize these factors were different from those used by House and Dessler. Leader Participative Behavior and Leader Achievement-Oriented Behavior were negatively and substantially correlated and, at the clerical level, all three leader behavior factors were substantially intercorrelated. Partial correlation coefficients were therefore used when hypotheses predicting relationships between the satisfaction of subordinates and leader behavior factors were tested.

CHAPTER VI

PERCEPTIONS OF ROLE AND TASK AND FEELINGS OF SATISFACTION

In this chapter the responses of school system personnel to the Role Perception, Task Description and the Minnesota Satisfaction Questionnaires are analyzed and reported. Findings relating to Hypotheses 1.0 and 2.0 and the specific hypotheses derived from these hypotheses are also reported and discussed.

The major purpose of data analyses reported in this chapter is to help in the interpretation of relationships between the satisfaction of subordinates and leader behavior. For this reason, the results of hypothesis testing and findings reported in tables appearing in this chapter are referred to in subsequent chapters.

ROLE PERCEPTION

The percentage frequencies of the responses to the Role Perception Questionnaire at the clerical, professional and administrative occupational levels are reported in Tables 48, 49 and 50 respectively, in Appendix C. These responses are presented in summary form in Table 9.

Testing Hypotheses 1.0, 1.11 and 1.12

The data in Table 9 enabled Hypothesis 1.0, and the two specific Hypotheses 1.11 and 1.12 to be investigated.

TABLE 9

MEAN SCORES, STANDARD DEVIATIONS AND RANGES ON ROLE PERCEPTION QUESTIONNAIRE ITEMS (N=149)

Role Perception	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Conflict			
Mean Score	29.2	30.11	23.9
Standard Deviation	10.5	8.4	9.4
Potential Range	8-56	8-56	8-56
Actual Range	8-47	15-47	8-47
Ambiguity			
Mean Score	16.9	18.8	14.1
Standard Deviation	6.2	5.5	5.6
Potential Range	6-42	6-42	6-42
Actual Range	6-32	9-33	6-34

Hypothesis 1.11. Hypothesis 1.11 stated that:

> The Role Conflict mean is highest at the administrative level, lower at the professional level and lowest at the clerical level.

This hypothesis was rejected. The Role Conflict mean at the professional level (30.11) was highest. The difference between the means at the clerical level (23.9) and the professional level (30.11), as well as between the clerical level (23.9) and the administrative level (29.2), was substantial.

Hypothesis 1.12. Hypothesis 1.12 stated that:

> The Role Ambiguity mean is highest at the administrative level, lower at the professional level and lowest at the clerical level.

This hypothesis was also rejected. The Role Ambiguity mean was highest at the professional level (18.8). The difference between the means at the clerical level (14.1) and the professional level (18.8) was substantial.

Hypothesis 1.0. Hypothesis 1.0 stated that:

> Perceptions of role conflict and role ambiguity differ between selected occupational levels.

Although the two specific hypotheses derived from this hypothesis were rejected, substantial differences were found between the professional and clerical levels as well as between the administrative and clerical levels. The data in Table 9 were therefore judged to be generally supportive of Hypothesis 1.0.

Discussion of the Findings

These hypotheses were based upon findings from investigations conducted by Szilagyi and Sims (1974: 622-634) in a health-care facility. However, House and Dessler (1974:61) point out that occupational level and job title are frequently unique to an organization, making comparisons difficult. This assertion helps to explain the results.

Among the school system personnel who perceived the highest levels of Role Ambiguity, the chief sources of ambiguity were the lack of clear, planned goals and clear explanation of what has to be done in the job (see responses to Items 3 and 13 in Tables 48, 49 and 50 in Appendix C). Professional personnel also found difficulty in dividing their time properly, and clerical personnel expressed doubts about the amount of authority they had in their jobs. The chief sources of Role Conflict were derived from the requirements to work in two or more groups that operate quite differently and from different standards of evaluation applied to work done (see responses to Items 7 and 11 on the Role Perception Questionnaire in Appendix C). These findings, together with the results of the tests of hypotheses, help to interpret results reported in the following chapters.

Finally, a methodological issue relating to the questionnaire requires discussion. Respondents were asked to indicate how accurately each statement reflected the existence of an organizational condition for them by answering on a continuum ranging from Very False to Very True. One respondent wrote "dead," "very dead," and "slightly dead," on the questionnaire, thus indicating the nature of the difficulty. The instrument could be modified to remove this difficulty.

Despite this methodological difficulty, the responses appeared to indicate that the instrument was able to discriminate among individuals at and within selected occupational levels on Role Conflict and Role Ambiguity.

TASK CHARACTERISTICS

The percentage frequencies of the responses to the Task Description Questionnaire at the clerical, professional and administrative occupational levels are reported in Tables 45, 46 and 47 respectively, in Appendix C. These responses are presented in summary form in Table 10.

Testing Hypotheses 2.0, 2.11, 2.12 and 2.13

The data in Table 10 enabled Hypotheses 2.0, 2.11, 2.12 and 2.13 to be investigated.

Hypothesis 2.11. Hypothesis 2.11 stated that:

> The Task Structure mean is lowest at the administrative level, higher at the professional level and highest at the clerical level.

This hypothesis was rejected. The lowest Task Structure mean was found at the professional level (12.0).

TABLE 10

MEAN SCORES, STANDARD DEVIATIONS AND RANGES ON TASK DESCRIPTION QUESTIONNAIRE ITEMS (N=149)

Task Characteristics	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Structure			
Mean Score	14.6	12.0	17.7
Standard Deviation	3.9	3.3	3.1
Potential Range	5-25	5-25	5-25
Actual Range	5-21	5-19	11-25
Repetitiveness			
Mean Score	11.7	13.2	17.6
Standard Deviation	3.2	3.0	4.1
Potential Range	5-25	5-25	5-25
Actual Range	6-21	7-20	9-25
Autonomy			
Mean Score	19.3	21.08	16.2
Standard Deviation	2.8	2.1	3.6
Potential Range	5-25	5-25	5-25
Actual Range	12-24	16-25	6-22

A substantial difference between the means at the clerical level (17.7) and the professional level (12.0), as well as the administrative level (14.6), was noted.

Hypothesis 2.12. Hypothesis 2.12 stated that:

> The Task Repetitiveness mean is lowest at the administrative level, higher at the professional level and highest at the clerical level.

This hypothesis was supported by the data in Table 10. A substantial difference between the means at the clerical level (17.6) and the professional level (13.2), as well as the administrative level (11.7) was noted.

Hypothesis 2.13. Hypothesis 2.13 stated that:

> The Task Autonomy mean is highest at the administrative level, lower at the professional level and lowest at the clerical level.

This hypothesis was rejected. The occupational level with the highest Task Autonomy mean was the professional level (21.08). The difference between the means at the clerical level (16.2) and the professional level (21.08), as well as the administrative level (19.3), was substantial.

Hypothesis 2.0. Hypothesis 2.0 stated that:

> Perceptions of task characteristics differ at selected occupational levels.

The data in Table 10 are generally supportive of this prediction. Although not all the specific hypotheses derived from Hypothesis 2.0 (see above) were supported, substantial differences did exist between the clerical level and the other occupational levels on three task characteristics, namely, structure, repetitiveness and autonomy.

Discussion of the Findings

As stated above, job titles are frequently unique to an organization. For this reason the basis for the development of these hypotheses seemed to be without foundation. However, these findings were of assistance in interpreting findings in subsequent chapters so the purpose of the analyses was achieved.

The frequencies of responses to the items in the Task Description Questionnaire (see Tables 45, 46 and 47 in Appendix C) indicated that professional and administrative personnel were highly autonomous on all aspects of their tasks measured. Clerical personnel had less autonomy, but among those who indicated highest autonomy, speed and planning of tasks were perceived to be under their own control. Tables 45, 46 and 47 show that all items relating to task repetitiveness discriminated between clerical personnel and the other two occupational groups. Most school system personnel, irrespective of occupational level, responded that their jobs required use of a specific set of steps, but all other items related to task structure discriminated between the clerical level and the other two levels. These observations were also of assistance in interpreting findings in subsequent chapters.

SATISFACTION

The percentage frequencies of responses to the Minnesota Satisfaction Questionnaire - Short Form (MSQ) at the clerical, professional and administrative occupational levels are presented in Tables 51, 52 and 53 respectively, in Appendix C. These responses are presented in summary form in Table 11.

No substantive conclusions were drawn about the data in these tables since analysis of satisfaction per se was not the purpose of this study. However, several observations about the satisfaction data were used to assist in the interpretation of findings pertinent to hypotheses regarding relationships between leader behavior and satisfaction. First, a notable feature of the responses from the professional group was that no respondent indicated great dissatisfaction on any item in the Intrinsic Satisfaction Scale and very few indicated any dissatisfaction. Second, Table 11 shows that satisfaction means on the Intrinsic Satisfaction Scale were well above the theoretical mean score (36). The satisfaction means on the Extrinsic Satisfaction Scale were not substantially higher than the theoretical mean score of eighteen. Finally, a greater spread of scores on satisfaction measures existed among respondents at the clerical level than at the administrative or professional levels.

TABLE 11

MEAN SCORES, STANDARD DEVIATIONS AND RANGES ON SATISFACTION QUESTIONNAIRE ITEMS (N=149)

Type of Satisfaction	Occupational Level Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic			
Mean Score	48.9	50.4	45.5
Standard Deviation	6.1	4.4	7.7
Potential Range	12-60	12-60	12-60
Actual Range	31-60	39-58	24-60
Extrinsic			
Mean Score	21.5	19.7	19.2
Standard Deviation	3.6	3.5	4.7
Potential Range	6-30	6-30	6-30
Actual Range	13-28	12-26	6-29
General			
Mean Score	78.3	78.3	72.1
Standard Deviation	9.9	7.1	12.4
Potential Range	20-100	20-100	20-100
Actual Range	60-96	59-88	44-96

SUMMARY

Substantial differences between the mean scores on the Role Conflict and Ambiguity Scales, as well as the Task Structure, Repetitiveness and Autonomy Scales, were found when the clerical occupational level was compared with both the administrative and professional levels. In the school system under study, professional personnel perceived the highest degree of Role Conflict, Role Ambiguity and Task Autonomy as well as the lowest degree of Task Structure. However, the mean scores on these scales at the administrative and professional levels were close together. The lowest degree of Task Repetitiveness was found at the administrative occupational level.

No substantive conclusions were drawn about the satisfaction data obtained from the school system.

CHAPTER VII

RELATIONSHIPS BETWEEN LEADER BEHAVIOR, ROLE, TASK AND SATISFACTION FACTORS

Several bivariate investigations of relationships are reported and discussed in this chapter. These investigations included the relationships between (1) leader behaviors and role perceptions, (2) leader behaviors and task characteristics, (3) role perceptions and the satisfaction of subordinates, and (4) task characteristics and the satisfaction of subordinates. Where applicable hypotheses relevant to these investigations are tested and the findings are reported and discussed. The criteria for determining whether correlation coefficients reported in this chapter are meaningful, important and substantial were discussed in Chapter IV.

The major purpose of these investigations is to assist interpretation of the relationships between the satisfaction of subordinates and leader behavior. For this reason data tabulated in this chapter are referred to in subsequent chapters.

LEADER BEHAVIOR, ROLE AND TASK CHARACTERISTICS

Because the leader behavior factors are not independent, partial correlation coefficients between these factors and role perceptions as well as task characteristics were calculated, reported and discussed.

These data are tabulated in the following sections.

Leader Participative Behavior

Partial correlation coefficients between Leader Participative Behavior and role as well as task factors are reported in Table 12.

TABLE 12

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND (1) ROLE FACTORS AND (2) TASK FACTORS (N=149)

	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Role Conflict	-.53	-.07	-.36
Role Ambiguity	-.34	-.26	-.36
Task Structure	.13	.03	.01
Task Repetitiveness	.03	.00	.13
Task Autonomy	.24	.21	.15

*Achievement-Oriented and Directive Leader Behavior held constant.

The data in Table 12 show that a substantial relationship existed between Leader Participative Behavior and Role Conflict at the administrative level (r = -.53). The association between Leader Participative Behavior and role factors also approached a substantial level among clerical personnel (r = -.36 in both cases). However, no substantial relationships were found at the professional level where the highest levels of Role Conflict and Ambiguity existed (see Table 9, p.123).

These findings suggested that leaders who consult with subordinates before taking action effectively reduce levels of conflict, and to a lesser extent, ambiguity, in the jobs of administrative and clerical personnel. In contrast, professional personnel seemed to look for other kinds of leader behavior to reduce these levels.

No substantial relationships were found between task characteristics and Leader Participative Behavior among school system personnel.

Leader Achievement-Oriented Behavior

Table 13 reports the partial correlation coefficients between Leader Achievement-Oriented Behavior and role factors together with task characteristics. The most substantial associations between leader behavior and perceptions of role found in this study were those between Leader Achievement-Oriented Behavior and Role Conflict, and to a lesser extent, Role Ambiguity. The correlation coefficients between Leader Achievement-Oriented Behavior and Role Conflict at the administrative, professional and clerical levels were r = -.44, r = -.54 and r = -.45 respectively. The corresponding correlation coefficients between Leader Achievement-Oriented Behavior and Role

Ambiguity were r = -.42, r = -.33 and r = -.28.

TABLE 13

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND (1) ROLE FACTORS AND (2) TASK FACTORS (N=149)

	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Role Conflict	-.44	-.54	-.45
Role Ambiguity	-.42	-.33	-.28
Task Structure	.16	.13	.02
Task Repetitiveness	.15	.06	.10
Task Autonomy	.03	-.15	-.18

*Participative and Directive Leader Behavior held constant.

The data in Table 13 indicate that in the central office of the school system under study, leader behavior characterized by explaining the way tasks should be carried out and letting subordinates know what is expected of them was associated with reduced role conflict. At the administrative level this kind of behavior was also associated with reduced role ambiguity. However, no substantial relationships were found between Leader Achievement-Oriented Behavior and task factors.

Leader Directive Behavior

The partial correlation coefficients between Leader Directive, Behavior and role, as well as task factors, are reported in Table 14.

TABLE 14

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER DIRECTIVE BEHAVIOR AND (1) ROLE FACTORS AND (2) TASK FACTORS (N=149)

	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Role Conflict	-.10	-.34	-.03
Role Ambiguity	-.27	-.37	.10
Task Structure	.08	.27	.20
Task Repetitiveness	.12	.01	.14
Task Autonomy	.01	-.12	-.23

*Participative and Achievement-Oriented Leader Behavior held constant.

The data in Table 14 indicate that no substantial relationships appear to exist between Leader Directive Behavior and role or task factors. However, the highest correlation coefficients between Leader Directive Behavior and Role Conflict and Ambiguity were found at the professional level (r = -.34 and r = -.37 respectively).

These findings may reflect the fact that Role Ambiguity and Role Conflict were also highest at the professional level (see Table 9, p.123). Role Conflict and Role Ambiguity may be so high that directive supervisory behavior tends to be associated with some reduction in these factors among professional personnel.

Discussion of the Findings

In an earlier investigation of the relationships between leader behavior and role perceptions, Szilagyi and Sims (1974:628) found a statistically significant negative relationship between leader Initiating Structure behavior and the role ambiguity of subordinates at the administrative level in a health-care facility, but not at lower occupational levels. This finding is consistent with that in this study (see Table 13), since items in the Leader Achievement-Oriented Behavior Scale overlap with Initiating Structure Scale items. Relationships between leader behavior and role conflict were not investigated by Szilagyi and Sims, but in this study these relationships were found to be more substantial than the relationships between leader behavior and role ambiguity.

In contrast to the findings with respect to role perceptions, no substantial relationships were found between leader behavior and task characteristics. House and Dessler (1974:60) argue that in their study the task structure variable was task-oriented and determined in large part by technological considerations. An illustrative example from the school system under study relates to the structured nature of typing tasks, determined by the mechanics of the typewriter rather than by a leader's behavior. If technological factors determine task characteristics, as illustrated, then the fact that no substantial relationships between leader behavior and task characteristics were found, could have been expected.

With respect to role perceptions, House and Dessler (1974:60) state that the role ambiguity variable is more social in nature than the task variables, and deals with the clarity with which a group member perceives what is expected of him by others. In this sense, an association between leader behavior and role perceptions could have been predicted and findings in this study were supportive of this view.

The findings discussed in this section have important implications for interpreting relationships between leader behavior and types of satisfaction, and therefore further references are made to them in the following chapters.

ROLE PERCEPTIONS AND SATISFACTION

The product-moment correlation coefficients between Role Conflict and types of satisfaction at the administrative, professional and clerical occupational levels are reported in Table 15. Table 16 reports similar data with respect to Role Ambiguity.

TABLE 15

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN ROLE CONFLICT AND SATISFACTION (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	-.43	-.50	-.25
Extrinsic	-.64	-.61	-.40
General	-.56	-.66	-.35

TABLE 16

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN ROLE AMBIGUITY AND SATISFACTION (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	-.54	-.46	-.39
Extrinsic	-.57	-.45	-.40
General	-.60	-.57	-.46

The data reported show that substantial negative relationships appear to exist between Role Conflict and Intrinsic, Extrinsic and General Satisfaction at the administrative and professional levels in the school system under study. Negative relationships also appear to exist at the clerical level. The lower correlation coefficients at the clerical level (r = -.25, r = -.40 and r = -.35 respectively) may be reflected in part in the substantially lower perceptions of Role Conflict found among these respondents, as reported in Table 9 on page 123. In Table 16 substantial negative correlation coefficients between Role Ambiguity and Intrinsic, Extrinsic and General Satisfaction at all levels are reported.

The substantial negative relationships found between types of satisfaction and Role Conflict, as well as Role Ambiguity, could have been expected as a result of undisputed findings from other studies. Rizzo et al. (1970:158) reported statistically significant negative relationships between types of satisfaction and Role Conflict, as well as Role Ambiguity. Similarly, House and Rizzo (1972:492) found statistically significant negative relationships between role perceptions and facets of satisfaction. However, House and Rizzo (1972:500) argue that their model of behavior within an organization required revision to place more emphasis on Role Ambiguity rather than Role Conflict. In a scale analysis of the Role Conflict and Role Ambiguity measures, Schuler et al.

(1977:122) also found statistically significant negative correlations between both Role Conflict and Role Ambiguity with facets of satisfaction across six samples--relationships which were claimed as meaningful. In contrast to the earlier studies, Schuler et al. (1977:125) found no reason to suppose that Role Ambiguity and Role Conflict were differentially important. The findings reported in Tables 15 and 16 tend to support this position, rather than the position of House and Rizzo.

2) The data tabulated in this section were important in interpreting relationships found between leader behavior and the satisfaction of subordinates when moderated by role perceptions, and so further references to this data occur in the following chapters.

TASK CHARACTERISTICS AND SATISFACTION

Hypotheses predicting relationships between task characteristics and satisfaction factors were developed for testing in this study. These hypotheses are examined in this section.

Testing Hypotheses 3.11, 3.12 and 3.13

Product-moment correlation coefficients required for testing these hypotheses are reported in Tables 17, 18 and 19.

Hypothesis 3.11. Hypothesis 3.11 stated that:

TABLE 17

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN TASK STRUCTURE AND SATISFACTION (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	-.25	-.12	-.03
Extrinsic	-.13	.11	-.08
General	-.24	-.05	-.05

TABLE 18

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN TASK REPETITIVENESS AND SATISFACTION (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	-.34	-.40	-.35
Extrinsic	-.09	-.16	-.04
General	-.30	-.35	-.27

TABLE 19

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN TASK AUTONOMY AND SATISFACTION (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	.44	.07	.34
Extrinsic	.30	-.04	-.10
General	.44	.03	.17

> Task Structure is negatively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction at the clerical, professional and administrative levels.

Table 17 shows that the predicted negative correlation coefficients were found. However, the judgment was made that the correlation coefficients were too small to indicate substantial relationships between the hypothesized factors. The highest correlation coefficient was between Task Structure and Intrinsic Satisfaction at the administrative level (r = -.25). Hypothesis 3.11 was therefore rejected.

Hypothesis 3.12. Hypothesis 3.12 stated that:

> Task Repetitiveness is negatively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction at the clerical, professional and administrative levels.

The predicted negative relationships were found at all levels (see Table 18). However, the highest correlation coefficient between Task Repetitiveness and Extrinsic Satisfaction was r = -.16 at the professional level and therefore these data were not supportive of Hypothesis 3.12. Nevertheless, the correlation coefficients between Task Repetitiveness and Intrinsic Satisfaction at the administrative, professional and clerical levels were r = -.34, r = -.40 and r = -.35 respectively. These data provide some support for the prediction that Task Repetitiveness is negatively and substantially correlated with Intrinsic Satisfaction at all levels. For this reason the judgment was made that Hypothesis 3.12 was partially supported.

Hypothesis 3.13. Hypothesis 3.13 stated that:

> Task Autonomy is positively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction at the clerical, professional and administrative levels.

Task Autonomy was positively correlated with Intrinsic and General Satisfaction at all levels but not with Extrinsic Satisfaction at the professional and clerical levels (see Table 19). However, the only substantial correlation coefficients found were those at the administrative level between Task Autonomy and Intrinsic Satisfaction (r = .44), and between Task Autonomy and General Satisfaction (r = .44). For this reason the judgment was made that the hypothesis was partially supported.

The insubstantial correlation coefficient between Task Autonomy and Intrinsic Satisfaction at the professional level (r = .07) was not in accordance with impressions gained in several chance interviews while data were being collected from these respondents. A possible explanation for this result may be the range restriction on both Intrinsic Satisfaction and Task Autonomy scores at this level. Tables 10 and 11 on pages 127 and 131 respectively show that, at the professional level, mean scores on these factors are close to the maximum possible scores. If this interpretation is accepted, then Table 19 may be judged to show that Task Autonomy is positively and, to some extent, substantially correlated with Intrinsic Satisfaction at all levels.

Discussion of the Findings

Seven studies which deal with the relationships between task characteristics and satisfaction, as well as other relationships, were reviewed by Pierce and Dunham (1976:85). In one of these studies the authors claimed, without equivocation, that people on complex jobs are more satisfied than employees on jobs low in variety, identity, significance, autonomy and feedback. The data obtained in this study did not support this claim. No substantial relationships were found between task characteristics and Extrinsic Satisfaction. Further, no substantial relationship with any type of satisfaction was found at the clerical level. This latter finding was consistent with another study reviewed in which the conclusion was drawn that among clerical employees, an increase in task variety and responsibility does not necessarily result in increased satisfaction.

Of the five other studies cited by Pierce and Dunham, four found significant relationships between task characteristics and satisfaction. All four found that task variety and task autonomy were positively related to satisfaction. Tables 18 and 19 show that some support for these findings was found in this study with respect to Intrinsic Satisfaction. However, the only substantial agreement between the four studies cited and this study of school system personnel is with respect to Task Autonomy and Intrinsic/General Satisfaction relationships at the administrative level.

SUMMARY

No substantial relationships were found between any leader behavior and task characteristics factors. However, Leader Participative Behavior was found to be negatively correlated with Role Conflict at the administrative level. Findings also suggested that Leader Participative Behavior tends to be associated with reduced Role Ambiguity at the administrative and clerical levels and with reduced Role Conflict at the clerical level. Leader Achievement-Oriented Behavior was negatively and substantially correlated with Role Conflict at all levels, as well as Role Ambiguity at the administrative level. Some evidence was also found to indicate that Leader Directive Behavior tends to be associated with reduced Role Ambiguity at the professional level. These findings suggested that task characteristics are related to technological considerations, whereas role perceptions are social in nature.

Substantial negative correlation coefficients between Role Conflict and all types of satisfaction were found at the administrative and professional levels. In addition, substantial negative correlation coefficients between Role Ambiguity and all types of satisfaction at the three occupational levels were found. These relationships were as expected.

No substantial relationships between Task Structure and types of satisfaction were found. Some support was found for hypotheses which predicted negative correlation coefficients between Task Repetitiveness and Intrinsic Satisfaction at the administrative, professional and clerical occupational levels. Hypotheses which predicted positive correlation coefficients between Task Autonomy and Intrinsic Satisfaction, as well as General Satisfaction, at the administrative level were supported.

CHAPTER VIII

LEADER DIRECTIVE BEHAVIOR AND SATISFACTION

This chapter deals with relationships found between Leader Directive Behavior and types of satisfaction of subordinates in a large urban school system.

In a factor analysis of the responses to the Leader Behavior Questionnaire (see Table 5, p.111), the third factor which emerged was labelled Leader Directive Behavior. Hypotheses relating to associations with this factor were developed for testing in this study. Initially, product-moment and partial correlation coefficients between Leader Directive Behavior and the satisfaction of subordinates at selected occupational levels are reported and discussed. Hypotheses for which these correlations are relevant are then examined. Following this section, hypotheses relating Leader Directive Behavior to satisfaction among groups of respondents scoring high and low on two measures of role perceptions and three measures of task characteristics are examined. The criteria used for accepting or rejecting the hypotheses under test were developed in Chapter IV. Finally, the findings reported and discussed in this chapter are related to the Path-Goal Theory of Leadership.

OCCUPATIONAL LEVELS

Product-Moment and Partial Correlation Coefficients

Tables 20 and 21 report the product-moment and partial correlation coefficients between Leader Directive Behavior and types of satisfaction found in this study.

A comparison of the correlation coefficients reported in the two tables revealed substantial differences, particularly at the clerical occupational level. These differences reflected the intercorrelations among the three leader behavior factors reported in Table 8 on page 119. When the influence of Achievement-Oriented and Participative Behavior was held constant, inconsequential differences between correlation coefficients became substantial (see Tables 20 and 21). For example, when administrative and clerical levels were compared in Table 20, the difference in the amount of variance in Intrinsic Satisfaction accounted for by Leader Directive Behavior was six percent. However, when Achievement-Oriented and Participative Behavior were held constant, the difference in the amount of variance accounted for was twenty-one percent. For this reason, partial correlation coefficients between the satisfaction of subordinates and Leader Directive Behavior were considered more meaningful than product-moment correlation coefficients in investigating the relevant predictions about these relationships.

TABLE 20

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN LEADER DIRECTIVE BEHAVIOR AND SATISFACTION AT SELECTED OCCUPATIONAL LEVELS (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	.24	.01	.00
Extrinsic	-.03	.03	-.14
General	.12	.00	-.05

TABLE 21

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER DIRECTIVE BEHAVIOR AND SATISFACTION AT SELECTED OCCUPATIONAL LEVELS (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	.32	.04	-.32
Extrinsic	.20	.15	-.32
General	.27	.07	-.36

*Participative and Achievement-Oriented Leader Behavior held constant.

Testing Hypotheses 4.11, 4.12 and 4.21

The data relevant to these hypotheses are reported in Table 21.

Hypothesis 4.11. Hypothesis 4.11 stated that:

> Leader Directive Behavior is negatively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction at the clerical occupational level.

The predicted negative correlation coefficients were found, but only the correlation coefficient between Leader Directive Behavior and General Satisfaction approached a substantial value (r = -.36). The correlation coefficients between Leader Directive Behavior and Intrinsic and Extrinsic Satisfaction were r = -.32 in both cases. Since the General Satisfaction measure incorporated the intrinsic and extrinsic facets of satisfaction, an overall assessment of the data suggested partial support for Hypothesis 4.11.

Hypothesis 4.12. Hypothesis 4.12 stated that:

> Leader Directive Behavior is positively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction at the professional and administrative occupational levels.

The predicted positive relationships were found, but no substantial correlation coefficients were reported. Although some evidence of support for the hypothesis was indicated at the administrative level with respect to Intrinsic Satisfaction (r = .32), Hypothesis 4.12 was not supported by the data in Table 21.

Hypothesis 4.21. Hypothesis 4.21 stated that:

> The positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction is highest at the administrative level, lower at the professional level, and lowest at the clerical level.

The correlation coefficients were ordered as predicted, and substantial differences between the administrative and clerical levels with respect to the three types of satisfaction were reported. When administrative and clerical levels were compared, the differences in the amount of variance in Intrinsic, Extrinsic and General Satisfaction accounted for by Leader Directive Behavior were twenty-one percent, fourteen percent and eighteen percent respectively. However, the correlation coefficients between Leader Directive Behavior and Intrinsic, Extrinsic and General Satisfaction at the clerical level were negative, not positive as predicted. Nevertheless, the data reported in Table 21 supported Hypothesis 4.21 on an overall basis.

ROLE PERCEPTIONS

To investigate hypotheses predicting relationships between the satisfaction of subordinates and Leader Directive Behavior contingent upon subordinates' role perceptions, the respondents were divided into three approximately equal groups, initially according to scores on the Role Conflict Scale and then on the Role Ambiguity Scale. The numbers in the groups varied due to the need to avoid placing respondents with the same score in two different groups. Partial correlation coefficients were then calculated and used to examine the predictions made. The hypotheses did not make any predictions about the group scoring in the medium range on the scales, but these correlation coefficients are reported for comparative purposes. Tables 22 and 23 report the data for groups formed according to Role Conflict scores and Role Ambiguity scores respectively.

Testing Hypotheses 4.31 and 4.32

Hypothesis 4.31. Hypothesis 4.31 stated that:

> A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the high Role Conflict personnel group than in the low Role Conflict personnel group.

The data in Table 22 show that the correlation coefficients are negative, contrary to the predictions made. Further, no substantial differences between high and low scoring groups on the Role Conflict Scale were found. For example, the correlation coefficients between Leader Directive Behavior and Intrinsic Satisfaction were r = -.19 and r = -.25 for the high and low Role Conflict groups respectively, therefore Hypothesis 4.31 was judged to be not supported. Role Conflict did not appear ~~to~~ be associated with the moderation of relationships between the satisfaction of subordinates and Leader Directive Behavior.

TABLE 22

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER DIRECTIVE BEHAVIOR AND SATISFACTION FOR DIFFERING ROLE CONFLICT GROUPS (N=149)

Type of Satisfaction	Role Conflict		
	High** (n=50)	Medium** (n=52)	Low** (n=47)
Intrinsic	-.19	-.26	-.25
Extrinsic	-.24	.02	-.35
General	-.23	-.22	-.32

*Participative and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 31-47; "Medium" scores were 22-30; "Low" scores were 8-21.

TABLE 23

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER DIRECTIVE BEHAVIOR AND SATISFACTION FOR DIFFERING ROLE AMBIGUITY GROUPS (N=149)

Type of Satisfaction	Role Ambiguity		
	High** (n=43)	Medium** (n=61)	Low** (n=45)
Intrinsic	-.13	-.36	-.27
Extrinsic	.04	-.31	-.25
General	-.08	-.44	-.29

*Participative and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 19-34; "Medium" scores were 13-18; "Low" scores were 6-12.

Hypothesis 4.32. Hypothesis 4.32 stated that:

> A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the high Role Ambiguity personnel group than in the low Role Ambiguity personnel group.

Table 23 shows that the predicted positive correlation coefficients were not found. Further, no substantial differences in the correlation coefficients between the high and low scoring groups on the Role Ambiguity Scale were found. For example, the correlation coefficients between Leader Directive Behavior and Intrinsic Satisfaction were r = -.13 and r = -.27 for the high and low Role Ambiguity groups respectively. Therefore Hypothesis 4.32 was judged to be not supported. Role Ambiguity did not appear to be associated with the moderation of relationships between Leader Directive Behavior and subordinates' satisfaction.

Nevertheless, Table 23 shows some evidence that Role Ambiguity moderated the relationships between Leader Directive Behavior and General Satisfaction. A substantial level of general dissatisfaction with Leader Directive Behavior was found in the medium scoring Role Ambiguity group (r = -.44), but this relationship did not exist in the high Role Ambiguity group (r = -.08).

TASK CHARACTERISTICS

To test hypotheses predicting relationships between the satisfaction of subordinates and Leader Directive

Behavior contingent upon task characteristics, respondents were divided into groups in a similar fashion to that described in the previous section. Initially, respondents were divided according to scores on the Task Structure Scale, then on the Task Repetitiveness Scale, and finally on the Task Autonomy Scale.

Testing Hypotheses 4.41, 4.42 and 4.43

Hypothesis 4.41. Hypothesis 4.41 stated that:

> A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the low Task Structure personnel group than in the high Task Structure personnel group.

The data relevant to this hypothesis are contained in Table 24.

The predicted positive correlation coefficients were not found. Further, although the predicted ordering of the correlation coefficients was found, the differences between them were not substantial. For example, the correlation coefficients between Leader Directive Behavior and Intrinsic Satisfaction were r = -.24 and r = -.05 for the high and low Task Structure groups respectively. Hypothesis 4.41 was therefore rejected. Task Structure appeared not to be associated with moderation of the relationships between Leader Directive Behavior and the satisfaction of school system personnel.

TABLE 24

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER DIRECTIVE BEHAVIOR AND SATISFACTION FOR DIFFERING TASK STRUCTURE GROUPS (N=149)

Type of Satisfaction	Task Structure High** (n=49)	 Medium** (n=54)	 Low** (n=46)
Intrinsic	-.24	-.15	-.05
Extrinsic	-.26	-.08	.14
General	-.29	-.12	-.01

*Participative and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 18-25; "Medium" scores were 14-17; "Low" scores were 5-13.

Hypothesis 4.42. Hypothesis 4.42 stated that:

> A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the low Task Repetitiveness personnel group than in the high Task Repetitiveness personnel group.

The data relevant to this hypothesis are reported in Table 25.

The predicted positive correlation coefficients between Leader Directive Behavior and the satisfaction of subordinates were found in the group scoring low on the Task Repetitiveness Scale, but these correlation coefficients were not substantial. The correlation coefficient between Leader Directive Behavior and Extrinsic Satisfaction was

TABLE 25

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER DIRECTIVE BEHAVIOR AND SATISFACTION FOR DIFFERING TASK REPETITIVENESS GROUPS (N=149)

Type of Satisfaction	Task Repetitiveness High** (n=43)	Medium** (n=60)	Low** (n=46)
Intrinsic	-.37	-.12	.00
Extrinsic	-.47	.03	.22
General	-.44	-.12	.13

*Participative and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 17-25; "Medium" scores were 12-16; "Low" scores were 6-11.

highest (r = .22). In contrast, negative substantial correlations were found between the satisfaction of subordinates and Leader Directive Behavior in the high Task Repetitiveness group. For example, the correlation coefficient between Leader Directive Behavior and Extrinsic Satisfaction was r = -.47. The amount of variance in satisfaction accounted for by Leader Directive Behavior was substantially different between the high and low scoring groups. The greatest difference between the groups was found with respect to the relationship between Leader Directive Behavior and Extrinsic Satisfaction (twenty-seven percent). In addition, the correlation coefficients in

Table 25 were ordered as predicted. Therefore, although negative correlation coefficients were found, Hypothesis 4.42 was supported in the overall sense. Task Repetitiveness seemed to be associated with moderation of the relationships between the satisfaction of school system personnel and Leader Directive Behavior.

Hypothesis 4.43. Hypothesis 4.43 stated that:

> A higher positive correlation between Leader Directive Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the high Task Autonomy personnel group than in the low Task Autonomy personnel group.

Table 26 contains the data required to examine these predictions in the school system.

TABLE 26

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER DIRECTIVE BEHAVIOR AND SATISFACTION FOR DIFFERING TASK AUTONOMY GROUPS (N=149)

Type of Satisfaction	Task Autonomy		
	High** (n=50)	Medium** (n=58)	Low** (n=41)
Intrinsic	.22	-.23	-.10
Extrinsic	.15	-.16	-.38
General	.21	-.25	-.21

*Participative and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 21-25; "Medium" scores were 17-20; "Low" scores were 6-16.

Table 26 shows that the predicted positive relationships between Leader Directive Behavior and subordinates' satisfaction were found in the group scoring highest on the Task Autonomy Scale but not in the low scoring group. However, the positive correlation coefficients were not substantial. The highest correlation coefficient found was between Leader Directive Behavior and Intrinsic Satisfaction (r = .22). In contrast, a substantial negative correlation coefficient was found between the Extrinsic Satisfaction of school system personnel and Leader Directive Behavior in the low Task Autonomy group (r = -.38). As predicted, the amount of variance in Extrinsic Satisfaction accounted for by Leader Directive Behavior was substantially different between high and low scoring Task Autonomy groups (seventeen percent). No substantial differences were found between groups with respect to the other relationships between satisfaction and Leader Directive Behavior. Taking into consideration all these data, including the unexpected negative correlation coefficients, Hypothesis 4.43 was judged to be supported with respect to the relationship between Leader Directive Behavior and Extrinsic Satisfaction, but not in other respects.

DISCUSSION OF THE FINDINGS

In this section the findings resulting from testing the hypotheses are interpreted in terms of their meaning for school system personnel. The findings are also related to Path-Goal Theory of Leadership propositions regarding leader directiveness.

Comparisons of the findings in this chapter with findings from other studies were difficult to make because leader behavior scales were not exactly equivalent, and furthermore, the findings from a number of studies are not consistent with one another. These points are further discussed in the concluding chapter.

Interpreting the Findings

Hypotheses 4.11, 4.12 and 4.21 were formulated to test predictions that occupational level is associated with moderation of the relationships between Leader Directive Behavior and the satisfaction of subordinates. The data reported in Table 21 show that leader behavior characterized by frequent determination of what and how work shall be done together with scheduling of the work and observance of rules and regulations was generally dissatisfying to clerical staff. Clerical personnel in the school system seemed to regard such leader behavior as overly close supervision. However, behavior dissatisfying to clerical personnel was not dissatisfying or satisfying to administrative and professional personnel.

Explanations for the differences between occupational levels regarding the association of Leader Directive Behavior with subordinates' satisfaction were sought in the differing perceptions of role and task characteristics among school system personnel. Tables 9 and 10 on pages 123 and 127 reported the existence of a continuum of perceptions of role and task characteristics. However, Role Conflict and Role Ambiguity did not appear to be associated with moderation of the relationships between Leader Directive Behavior and the satisfaction of subordinates (see Tables 22 and 23), but Task Repetitiveness and Task Autonomy seemed to be associated with moderation of these relationships (see Tables 25 and 26). Data tabulated in this chapter suggested that the association of occupational level with moderation of the relationships between the satisfaction of subordinates and Leader Directive Behavior were reflected in differences among personnel with respect to Task Repetitiveness and, to a lesser extent, Task Autonomy.

The relationship moderated to the greatest extent was that between Leader Directive Behavior and Extrinsic Satisfaction. These findings mean that leader directiveness, as described above, seemed to be dissatisfying to personnel in the school system performing repetitive tasks which required little independent judgment in performance. The most important expressions of dissatisfaction relating to Leader Directive Behavior were associated with the way the supervisor handles his employees, the competence of the supervisor, praise given by the supervisor, the chances for advancement, pay and the amount of work done, and the way that the board policies are put into effect. However, under conditions of high autonomy in the performance of tasks which were not-repetitive, expressions of dissatisfaction were not apparent. Under these conditions directive leadership, though not associated with expressions of satisfaction, seemed to be tolerated in the school system.

An indication that Task Repetitiveness and Task Autonomy, but not Task Structure, were the most important task characteristics was found in an investigation of the association of task characteristics with subordinate satisfaction. Some correlation coefficients of substantial magnitude were found between subordinates' satisfaction and measures of Task Repetitiveness as well as Task Autonomy (see Tables 18 and 19 on page 143) but not between Task Structure and subordinates' satisfaction (see Table 17, p.143). These findings appeared to be reflected in the relationships between Leader Directive Behavior and subordinates' satisfaction discussed in the previous paragraph.

No substantial relationships were found between Leader Directive Behavior and task characteristics factors (see Table 13, p.136). However, Task Repetitiveness and Task Autonomy were associated with moderation of the relationships between Leader Directive Behavior and Extrinsic Satisfaction in particular. Therefore, these task characteristics seemed to be indirectly associated with leader directiveness.

Relating the Findings to Path-Goal Theory

According to House and Mitchell (1974:90), the Path-Goal Theory of Leadership states that leader directiveness has a negative correlation with the satisfaction of subordinates engaged in clear tasks. The negative correlation coefficients predicted by the Theory were found at the clerical level and among subordinates performing repetitious tasks. A negative relationship with Extrinsic Satisfaction was also found among subordinates with little autonomy in the performance of tasks. In these circumstances the expectation that leader directiveness would be viewed as unnecessarily close supervision seemed well founded. Attempts at further clarification of paths to desired goals appeared to be viewed as redundant. Although increased leader directiveness may increase performance by preventing malingering, according to House and Mitchell (1974:88), it will also result in increased dissatisfaction. As could be predicted from the Theory, dissatisfaction was most closely associated with extrinsic satisfaction facets such as praise for doing a good job, the competence of the supervisor and the way the supervisor handles his employees, since these facets clearly relate to the leader.

In addition, Path-Goal Theory (House and Dessler, 1974:33) asserts that the more dissatisfying the task, the more subordinates will resent leader behavior directed at enforcing compliance to rules and procedures. Personnel in the school system expressed dissatisfaction with the Task Repetitiveness on facets of Intrinsic Satisfaction (see Table 18 on p.143). Therefore, following the reasoning in the statement of the Theory, dissatisfaction with Leader Directive Behavior could have been expected among subjects engaged in repetitious tasks. The findings in this study suggested these expectations were borne out, since Task Repetitiveness was found to be associated with moderation of the relationships between all types of satisfaction and Leader Directive Behavior.

The Theory also predicts, according to House and Mitchell (1974:90), that leader directiveness has a positive correlation with satisfaction of subordinates engaged in ambiguous tasks. Positive relationships between all types of satisfaction and Leader Directive Behavior at the administrative and professional levels, and under conditions of low Task Repetitiveness and high Task Autonomy were found as the Path-Goal Theory would predict, but the correlation coefficients were not substantial. Therefore these data were not supportive of the Path-Goal Theory. This conclusion is further discussed in the concluding chapter where it is considered in conjunction with findings regarding relationships between Leader Achievement-Oriented Behavior and the satisfaction of subordinates.

When all the findings discussed in this chapter were taken into account, the overall conclusion was that those aspects of the Path-Goal Theory dealing with relationships between leader directiveness and subordinates' satisfaction were supported by data obtained from school system personnel. The Theory predictions seemed to be applicable in the large urban school system selected for this study.

SUMMARY

Although predictions were made that Leader Directive Behavior is positively correlated with the satisfaction of subordinates engaged in ambiguous tasks, no substantial positive correlation coefficients were found at the administrative or professional levels or under conditions of low Task Repetitiveness and Task Structure. Furthermore, no substantial positive correlation coefficients between Leader Directive Behavior and the satisfaction of subordinates were found under conditions of high Task Autonomy, Role Conflict and Role Ambiguity, but several substantial negative correlation coefficients were found, as predicted. Leader Directive Behavior was substantially and negatively correlated with General Satisfaction at the clerical level. No evidence was found that Role Conflict and Ambiguity or Task Structure moderated relationships between Leader Directive Behavior and subordinates' satisfaction, but Task Repetitiveness and Task Autonomy was associated with moderation of these relationships.

Substantial levels of dissatisfaction with Leader Directive Behavior were found among school system personnel engaged in repetitious tasks. In addition, a substantial negative relationship with Extrinsic Satisfaction was found among subordinates with little autonomy in the performance of tasks. In contrast, dissatisfaction with Leader Directive Behavior was not apparent among subordinates with high Task Autonomy and low Task Repetitiveness.

These findings were examined in the light of Path-Goal Leadership Theory predictions. The judgment was made that Path-Goal Theory hypotheses with respect to Leader Directive Behavior were supported on the whole by the data. Path-Goal Theory predictions with respect to Leader Directive Behavior applied in the large urban school system selected for this study.

CHAPTER IX

LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION

In this chapter, the association of Leader Participative Behavior with the satisfaction of subordinates in a large urban school system is investigated.

An oblique factor solution of responses to the Leader Behavior Questionnaire resulted in the emergence of Leader Participative Behavior as the first factor (see Table 5 on p.111). Several of the items taken from the Supportive Leadership Scale together with all of the items from the Participative Leadership Scale (House and Dessler, 1974:43) loaded high on this factor. Hypotheses regarding the relationship between Leader Participative Behavior and types of satisfaction are tested in this chapter, using a leadership scale developed around the loadings of all twenty-two leader behavior items on Factor I as the basis for data analysis (see Chapter V). The criteria used for accepting or rejecting the hypotheses under test were formulated in Chapter IV.

Initially product-moment and partial correlation coefficients between Leader Participative Behavior and types of satisfaction at selected occupational levels are reported and discussed. Hypotheses for which these correlation coefficients are relevant are then tested.

Following this section, hypotheses relating Leader Participative Behavior to satisfaction among groups of respondents scoring high and low on two measures of role perceptions and three measures of task characteristics are tested. Finally, the findings reported and discussed in this chapter are examined in the light of Path-Goal Theory of Leadership predictions.

OCCUPATIONAL LEVELS

Product-Moment and Partial Correlation Coefficients

The product-moment and partial correlation coefficients between Leader Participative Behavior and types of satisfaction are reported in Tables 27 and 28 respectively. When the influence of Directive and Achievement-Oriented Behaviors were held constant, several inconsequential correlation coefficients reported in Table 27 became substantial. For example, the product-moment correlation coefficient between Leader Participative Behavior and Extrinsic Satisfaction at the professional level was r = .23, whereas the corresponding partial correlation coefficient was r = .69. Directive and Achievement-Oriented Behavior masked the substantial relationships between Participative Behavior and types of satisfaction. The differences between product-moment and partial correlation coefficients were attributed to the intercorrelations between the three leader behavior factors reported in Table 8 on page 119. Partial correlation

TABLE 27

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION AT SELECTED OCCUPATIONAL LEVELS (N=149)

Type of Satisfaction	Occupational Level Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	.28	.07	.43
Extrinsic	.48	.23	.23
General	.38	.17	.42

TABLE 28

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION AT SELECTED OCCUPATIONAL LEVELS (N=149)

Type of Satisfaction	Occupational Level Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	.40	.25	.51
Extrinsic	.78	.69	.65
General	.57	.54	.64

*Directive Behavior and Achievement-Oriented Leader Behavior held constant.

coefficients were therefore reported in subsequent analyses.

Testing Hypotheses 6.11 and 6.21

Hypothesis 6.11. Hypothesis 6.11 stated that:

> Leader Participative Behavior is positively correlated with Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction at the administrative, professional and clerical occupational levels.

The data in Table 28 show that the predicted positive correlation coefficients were found in the school system under study. The correlation coefficient between Leader Participative Behavior and Intrinsic Satisfaction at the professional level (r = .25) was not substantial, but all other correlation coefficients were of substantial value. An overall assessment of the data, therefore, leads to the judgment that the data are supportive of Hypothesis 6.11.

Two substantial differences between the clerical occupational level and the other two levels were indicated in the data reported in Table 28. First, the amount of variance in Intrinsic Satisfaction accounted for by Leader Participative Behavior was substantially greater at the clerical level (twenty-six percent) than at the professional level (six percent). Second, the amount of variance in Extrinsic Satisfaction accounted for by Leader Participative Behavior was substantially greater at the administrative level (sixty-one percent) than at the clerical level (forty-two percent). These findings are further discussed in the last section of this chapter.

Hypothesis 6.21. Hypothesis 6.21 stated that:

> Within the clerical occupational level, a higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the high Role Ambiguity personnel group than in the low Role Ambiguity personnel group.

To test this hypothesis sixty-six respondents comprising the clerical occupational group were divided into two approximately equal groups. One group scored 14-34 on the Role Ambiguity Scale and the other group scored 6-12. Six respondents scoring 13 were excluded from the two groups. Partial correlation coefficients between Leader Participative Behavior and types of satisfaction were then calculated and reported in Table 29.

TABLE 29

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION AT THE CLERICAL LEVEL FOR DIFFERING ROLE AMBIGUITY GROUPS (n=66)

Type of Satisfaction	Role Ambiguity	
	High** (n=29)	Low** (n=31)
Intrinsic	.46	.53
Extrinsic	.68	.63
General	.61	.65

*Directive and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 14-34; "Low" scores were 6-12.

The data in Table 29 show no support for Hypothesis 6.21. Leader Participative Behavior was positively and substantially related to all types of satisfaction of subordinates irrespective of their perceptions of Role Ambiguity. In the school system Role Ambiguity was not associated with moderation of the relationships between Leader Participative Behavior and the satisfaction of clerical personnel.

ROLE PERCEPTIONS

In this study hypotheses were formulated to investigate the association of role perceptions with the moderation of relationships between Leader Participative Behavior and the satisfaction of subordinates. To test these hypotheses, the 149 respondents were divided in the manner described in the section corresponding to this section in Chapter VIII.

Testing Hypotheses 6.31 and 6.32

The data relevant to Hypotheses 6.31 and 6.32 are reported in Tables 30 and 31 respectively.

Hypothesis 6.31. Hypothesis 6.31 stated that:

> A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the high Role Conflict personnel group than in the low Role Conflict personnel group.

No substantial differences were found between high and low Role Conflict groups with respect to relationships

TABLE 30

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION FOR DIFFERING ROLE CONFLICT GROUPS (N=149)

Type of Satisfaction	Role Conflict		
	High** (n=50)	Medium** (n=52)	Low** (n=47)
Intrinsic	.20	.33	.60
Extrinsic	.58	.68	.67
General	.41	.53	.69

*Directive and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 31-47; "Medium" scores were 22-30; "Low" scores were 8-21.

TABLE 31

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION FOR DIFFERING ROLE AMBIGUITY GROUPS (N=149)

Type of Satisfaction	Role Ambiguity		
	High** (n=43)	Medium** (n=61)	Low** (n=45)
Intrinsic	.40	.34	.44
Extrinsic	.68	.62	.63
General	.54	.59	.58

*Directive and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 19-34; "Medium" scores were 13-18; "Low" scores were 6-12.

between Leader Participative Behavior and Extrinsic Satisfaction. The correlation coefficients in the high and low Role Conflict groups were r = .58 and r = .67 respectively. The data in Table 30 also show that Leader Participative Behavior was positively and substantially correlated with Intrinsic Satisfaction in the low Role Conflict group (r = .60), but not in the high Role Conflict group (r = .20). This finding was the opposite of the predicted relationships.

Hypothesis 6.32. Hypothesis 6.32 stated that:

> A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the high Role Ambiguity personnel group than in the low Role Ambiguity personnel group.

Table 31 shows that although the relationships were positive as predicted, no substantial differences existed between high and low Role Ambiguity personnel groups on any of the satisfaction factors. For example, the correlation coefficients between Leader Participative Behavior and Extrinsic Satisfaction in the high and low Role Ambiguity groups were r = .68 and r = .63 respectively. Hypothesis 6.32 was judged, therefore, as not supported by the data obtained from respondents in the school system.

TASK CHARACTERISTICS

In order to test hypotheses predicting that task characteristics were associated with moderation of the relationships between Leader Participative Behavior and types of satisfaction of subordinates, school system personnel were divided into three approximately equal groups according to scores on three task characteristics scales. This procedure was described in the section corresponding to this section in Chapter VIII.

Testing Hypotheses 6.41, 6.42 and 6.43

Hypothesis 6.41. Hypothesis 6.41 stated that:

> A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the low Task Structure personnel group than in the high Task Structure personnel group.

The data relevant to this hypothesis are reported in Table 32. The predicted positive correlation coefficients between Leader Participative Behavior and all types of satisfaction factors were found. However, no substantial differences were found in the association of Leader Participative Behavior with Extrinsic Satisfaction under varying Task Structure conditions. The correlation coefficients between Leader Participative Behavior and Extrinsic Satisfaction for high and low Task Structure groups were r = .60 and r = .67 respectively. The correlation between Leader Participative Behavior and Intrinsic Satisfaction was substantial for subordinates engaged in structured tasks (r = .53) but not for subordinates working on relatively unstructured tasks (r = .23). This finding was opposite to that predicted in

TABLE 32

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION FOR DIFFERING TASK STRUCTURE GROUPS (N=149)

Type of Satisfaction	Task Structure		
	High** (n=49)	Medium** (n=54)	Low** (n=46)
Intrinsic	.53	.37	.23
Extrinsic	.60	.68	.67
General	.63	.55	.49

*Directive and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 18-25; "Medium" scores were 14-17; "Low" scores were 5-13.

predicted in Hypothesis 6.41. Overall assessment of these school system data leads to the conclusion that Hypothesis 6.41 was not supported.

Hypothesis 6.42. Hypothesis 6.42 stated that:

> A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the low Task Repetitiveness personnel group than in the high Task Repetitiveness personnel group.

The data relevant to this hypothesis are reported in Table 33. The predicted positive correlation coefficients between Leader Participative Behavior and types of satisfaction were found. However, no substantial differences were found between the correlation of Leader

TABLE 33

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION FOR DIFFERING TASK REPETITIVENESS GROUPS (N=149)

Type of Satisfaction	Task Repetitiveness High** (n=43)	 Medium** (n=60)	 Low** (n=46)
Intrinsic	.59	.37	.33
Extrinsic	.64	.69	.73
General	.67	.60	.59

*Directive and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 17-25; "Medium" scores were 12-16; "Low" scores were 6-11.

Participative Behavior with Extrinsic Satisfaction among subordinates engaged in repetitious tasks and those performing relatively varied tasks. The correlation coefficients between Leader Participative Behavior and Extrinsic Satisfaction for high and low Task Repetitiveness groups were r = .64 and r = .73 respectively. Furthermore, a substantial positive correlation between Leader Participative Behavior and Intrinsic Satisfaction was found among subordinates engaged in repetitious tasks (r = .59) but not those engaged in more varied tasks (r = .33). This finding was opposite to that predicted in Hypothesis 6.42. Hypothesis 6.42 was judged, therefore, as not supported by the data.

Hypothesis 6.43. Hypothesis 6.43 stated that:

> A higher positive correlation between Leader Participative Behavior and Intrinsic Satisfaction, Extrinsic Satisfaction and General Satisfaction occurs in the high Task Autonomy personnel group than in the low Task Autonomy personnel group.

The data relevant to this hypothesis are reported in Table 34.

TABLE 34

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER PARTICIPATIVE BEHAVIOR AND SATISFACTION FOR DIFFERING TASK AUTONOMY GROUPS (N=149)

Type of Satisfaction	Task Autonomy		
	High** (n=50)	Medium** (n=48)	Low** (n=41)
Intrinsic	.31	.55	.24
Extrinsic	.59	.76	.56
General	.53	.70	.41

*Directive and Achievement-Oriented Leader Behavior held constant.

**"High" scores were 21-25; "Medium" scores were 17-20; "Low" scores were 6-16.

Table 34 shows that the expected positive correlation coefficients between Leader Participative Behavior and the three satisfaction factors were found. However, with regard to these relationships, there was no substantial difference between the high and low Task Autonomy groups. For example, the correlation coefficients between Leader Participative Behavior and Extrinsic Satisfaction for high and low Task Autonomy groups were r = .59 and r = .56 respectively. Therefore Hypothesis 6.43 was not supported by these data.

Despite this judgment, which was made on the basis of a comparison of high and low Task Autonomy groups, the data in Table 34 indicate that Task Autonomy appears to be associated with moderation of the relationships between Leader Participative Behavior and types of satisfaction. Leader Participative Behavior had a substantially higher positive correlation with both Intrinsic and Extrinsic Satisfaction in the medium Task Autonomy group (r = .55 and r = .76 respectively) than in the low Task Autonomy group (r = .24 and r = .56 respectively).

DISCUSSION OF THE FINDINGS

The discussion of the findings reported in this chapter is divided into two parts. First, the findings derived from hypothesis testing are interpreted in terms of their meaning for school system personnel, and then the findings are discussed in the light of Path-Goal Theory predictions.

As indicated in Chapter VII, comparisons between findings in this study and other studies are made in the concluding chapter.

Interpreting the Findings

The first major point to emerge from these findings was that Leader Participative Behavior was substantially and positively correlated with Extrinsic Satisfaction in all groups of school system personnel investigated in this study. Consultation with subordinates before taking action and the establishment of such relations with subordinates that consultation is allowed to occur easily, was satisfying to subordinates. Satisfaction was most clearly evident in expressed feelings about the way board policies are put into practice, pay and the amount of work done, chances for advancement, praise for doing a good job, the way the supervisor handles his men and in the competence of the supervisor in making decisions.

The association of Leader Participative Behavior with Extrinsic Satisfaction was positive and substantial irrespective of perceptions of Role Conflict and Role Ambiguity, or the task characteristics, Task Repetitiveness and Task Structure. These findings suggested that Leader Participative Behavior was so satisfying to subordinates that Role Conflict and Ambiguity, and Task Repetitiveness and Structure made little difference to the relationships between Leader Participative Behavior and Extrinsic Satisfaction.

Although Leader Participative Behavior was positively and substantially correlated with Extrinsic Satisfaction, an important difference noted was that

Participative Behavior was more satisfying to administrative personnel than to clerical personnel (see Table 28). The data in Table 34 suggested that this difference may possibly be reflected in differing perceptions of Task Autonomy. In Table 10 on page 127, the occupational levels were shown to be ordered from high to low as professional, administrative and clerical according to mean scores on Task Autonomy. This finding suggested the medium Task Autonomy group in Table 34 comprised a majority of administrative personnel and the low Task Autonomy group comprised largely clerical personnel. Therefore, the substantial difference between the medium Task Autonomy group and the low Task Autonomy group may have accounted for the substantial difference between the administrative level and the clerical level with respect to the relationship between Leader Participative Behavior and Extrinsic Satisfaction.

The second major point to emerge from these findings was that Leader Participative Behavior was substantially and positively correlated with Intrinsic Satisfaction at the clerical and administrative occupational levels, as well as under conditions of low Role Conflict, and high Task Structure and Repetitiveness, but not among professional personnel or under conditions of high Role Conflict, and low Task Structure and Repetitiveness. Role Conflict, Task Structure, Task Repetitiveness and occupational level were associated with moderation of the relationship between Leader Participative Behavior and Intrinsic Satisfaction among school system personnel.

The inconsequential correlation between Leader Participative Behavior and Intrinsic Satisfaction at the professional level was reflected in a comment made by a psychologist respondent: "He doesn't bother me and I don't bother him because we both respect each other's need to be let alone in order to do our work. When I need to inform him of items which I feel he should know, when I need his counsel, or when he needs to inform me re current events, we arrange to see each other." The insubstantial relationship between Leader Participative Behavior and Intrinsic Satisfaction may be accounted for by suggesting that satisfaction is not dependent on consultation with leaders but comes from other sources. The challenging nature of the task, as well as high Task Autonomy as indicated in Table 10 on page 127, when considered together with the reported comment above, suggested less need for consultative leadership among professional personnel.

The positive substantial correlation between Leader Participative Behavior and Intrinsic Satisfaction at the clerical level, and to a lesser extent at the administrative level, seemed to be reflected in perceptions of Role Conflict. Participative Behavior was substantially and negatively correlated with Role Conflict at the clerical and administrative levels but not at the professional level (see Table 12, p.134). Therefore, Participative Behavior may be intrinsically satisfying to school system personnel to the extent that such leader behavior reduces Role Conflict. The sources of Role Conflict among school system personnel (see Chapter VI) were different standards of evaluation applied to subordinates' work by superordinates and different expectations resulting from membership in several work groups. However, Leader Participative Behavior seemed to reduce these conflicts, and therefore the work was more satisfying to subordinates.

The positive substantial correlation between Leader Participative Behavior and Intrinsic Satisfaction found at the clerical level, but not at the professional level, also seemed to be reflected in perceptions of Task Structure and Task Repetitiveness. Table 10 on page 127 indicated that clerical personnel perceived tasks to be substantially more structured and repetitive than other personnel. Moreover, the data in Tables 32 and 33 show that those subordinates engaged in structured and repetitive tasks were substantially more intrinsically satisfied with Participative Behavior than others engaged in unstructured and varied tasks. Therefore, the conclusion was drawn that Leader Participative Behavior is a source of Intrinsic Satisfaction for clerical personnel and others engaged in structured, repetitive tasks.

Relating the Findings to Path-Goal Theory

The findings reported and discussed in this chapter provided some support for Path-Goal Theory propositions, but on the whole, the findings were not supportive. House and Dessler (1974:42) state that participative leadership is conceived of as a nondirective form of role-clarifying behavior analogous to instrumental leadership. An illustrative example cited was that the relationship between participative leadership and satisfaction would be expected to increase as task structure decreases. Similarly, the relationship would be expected to increase as task autonomy increases.

Partial support for this proposition was indicated since the positive correlation between Leader Participative Behavior and Extrinsic Satisfaction was substantially greater at the administrative level than at the clerical level. As suggested in the previous section, this finding may be associated with differences in Task Autonomy between the two occupational levels.

However, the Path-Goal Theory propositions were not supported with respect to the moderating effects of Role Ambiguity and Conflict, as well as Task Structure and Repetitiveness on the relationships between Leader Participative Behavior and Extrinsic Satisfaction. Moreover, Role Conflict, Task Structure and Task Repetitiveness were associated with moderation of the relationships between Leader Participative Behavior and

Intrinsic Satisfaction in a way opposite to that predicted, as described in the previous section. For these reasons, the view of participative leadership as clarifying goals and paths to goals was not supported by the findings reported in this chapter.

A possible explanation for the findings with respect to the relationships between Leader Participative Behavior and Intrinsic Satisfaction may be found in statements made about the Path-Goal Theory propositions. House and Mitchell (1974:88) propose that:

> . . . it is possible for the subordinate to receive the necessary cues to do the job and the needed rewards for satisfaction from sources other than the leader, for example, coworkers in the primary work group.

In these circumstances the association of Leader Participative Behavior with Intrinsic Satisfaction will be related to deficiencies in the work environment with respect to rewards needed for intrinsic, that is, self- or task-mediated satisfaction. In the school system, the work environment may be deficient in rewards needed for the satisfaction of clerical personnel and others engaged in repetitive, structured tasks, and therefore Leader Participative Behavior was an important source of intrinsic satisfaction. However, the work environment appeared not to be deficient in rewards needed for the intrinsic satisfaction of professional personnel who are engaged in varied, unstructured tasks, and therefore Leader Participative Behavior seemed to be irrelevant. This interpretation, which is consistent with Path-Goal Theory propositions relating to Consideration Behavior rather than Participative Behavior, is further discussed in the concluding chapter.

The view of participative leadership in the context of Path-Goal Theory expressed by House and Dessler (1974:42) was modified in the presentation of the Theory by House and Mitchell (1974:92-94). The development of Hypotheses 6.11 and 6.21 was based on the modifications made in the House and Mitchell presentation which suggested that under ambiguous task conditions, participative leadership will have a positive relationship with subordinate satisfaction regardless of the personality of subordinates. However, when task demands are clear, subordinate predispositions will moderate relationships between participative leadership and subordinates' satisfaction. House and Dessler (1974:60) also argue that, in the general sense, Role Ambiguity is a measure of subordinate personality, and therefore Role Ambiguity could be expected to moderate the relationships between the satisfaction of subordinates and Leader Participative Behavior among clerical personnel engaged in repetitious, structured tasks. The findings in this study did not support this expectation arising from Path-Goal Theory. Role Ambiguity was not associated with moderation of the relationships between Leader Participative Behavior and subordinates' satisfaction. The lack of support may be reflected either in the inadequacy of Role Ambiguity as a measure of the personality of subordinates, or in the inaccurate view of Leader Participative Behavior as path- and goal-clarifying behavior. This latter point is also further discussed in the concluding chapter.

SUMMARY

Two major points were made in the discussion of the tests of hypotheses relating to Leader Participative Behavior. First, Leader Participative Behavior was found to be positively and substantially correlated with the Extrinsic Satisfaction of all groups of personnel in the school system under study. Second, Leader Participative Behavior was substantially and positively correlated with the Intrinsic Satisfaction of (1) subordinates at the clerical, and to a lesser extent, the administrative level, and (2) personnel working under conditions of either low Role Conflict, or high Task Structure or low Task Repetitiveness. No substantial relationships were found at the professional level or under conditions of high Role Conflict, low Task Structure or low Task Repetitiveness.

Role Ambiguity did not seem to be associated with moderation of any of the relationships between Leader Participative Behavior and subordinates' satisfaction, but Role Conflict was associated with moderation of the relationships between Leader Participative Behavior and Intrinsic Satisfaction among school system personnel. Leader Participative Behavior was associated with reduced Role Conflict and consequently appeared to be intrinsically satisfying to subordinates.

Partial support was found for Path-Goal Theory of Leadership propositions. Leader Participative Behavior had a higher positive correlation with the Extrinsic Satisfaction of administrative personnel than clerical personnel. This finding seemed to be associated with differing perceptions of Task Autonomy.

Nevertheless, the Path-Goal Theory propositions relating to Leader Participative Behavior were not generally supported by findings in this study. The relationships between Leader Participative Behavior and Intrinsic Satisfaction found among school system personnel were opposite to those predicted by the Path-Goal Theory of Leadership. Under conditions of low Task Repetitiveness and Structure, needed rewards for the intrinsic satisfaction of subordinates appeared to come from sources other than leaders in the school system. The findings were not consistent with the view of participative leadership as goal- and path-clarifying behavior.

CHAPTER X

LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND SATISFACTION

The relationships between Leader Achievement-Oriented Behavior and the satisfaction of subordinates in a large, urban school system are discussed in this chapter.

An oblique factor solution of school system personnel responses to the Leader Behavior Questionnaire resulted in the emergence of Leader Achievement-Oriented Behavior as the second factor (see Table 5, p.111). As described in Chapter V, several items from the Instrumental and some from the Supportive Leadership Scales developed by House and Dessler (1974:46-47) loaded high on this factor. The satisfaction of subordinates with Leader Achievement-Oriented Behavior discussed in this chapter refers to Achievement-Oriented Behavior as indicated by the loadings of all twenty-two items on Factor II.

In this study, no hypotheses were developed to investigate the relationship between Leader Achievement-Oriented Behavior and the satisfaction of subordinates. However, the criteria established for accepting hypotheses, as described in Chapter IV, were used in this chapter to determine whether correlation coefficients were substantial, and also whether differences between correlation coefficients were substantial.

Initially, product-moment and partial correlation coefficients between Leader Achievement-Oriented Behavior and subordinates' satisfaction at selected occupational levels are reported and discussed. Following this section, the relationships between Leader Achievement-Oriented Behavior and the satisfaction of subordinates who have differing perceptions of Role Conflict and Ambiguity are investigated. In addition, the satisfaction of subordinates engaged in tasks with differing characteristics is related to Leader Achievement-Oriented Behavior.

Finally, tentative hypotheses based on the findings in this study are formulated for further investigation. These hypotheses are also discussed in the context of Path-Goal Leadership Theory propositions.

OCCUPATIONAL LEVELS

Product-Moment and Partial Correlation Coefficients

Product-moment and partial correlation coefficients between Leader Achievement-Oriented Behavior and types of satisfaction are reported in Tables 35 and 36 respectively. Comparisons made among the tabulated data show that inconsequential correlation coefficients between Leader Achievement-Oriented Behavior and the Extrinsic Satisfaction as well as the General Satisfaction of subordinates become substantial when Directive and Participative Leader Behavior are held constant. For example, the product-moment and partial correlation coefficients between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction at the

TABLE 35

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND SATISFACTION AT SELECTED OCCUPATIONAL LEVELS (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	.05	.24	-.18
Extrinsic	.33	.50	.30
General	.16	.43	.02

TABLE 36

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND SATISFACTION AT SELECTED OCCUPATIONAL LEVELS (N=149)

Type of Satisfaction	Occupational Level		
	Administrative (n=47)	Professional (n=36)	Clerical (n=66)
Intrinsic	.28	.34	.12
Extrinsic	.74	.77	.61
General	.47	.64	.42

*Directive and Participative Leader Behavior held constant.

administrative levels were r = .33 and r = .74 respectively. These differences were attributed to the intercorrelations among the leader behavior factors, as reported in Chapter V (see Table 8, p.119). For these reasons, the discussion and further data analyses which follow were based upon partial correlation coefficients between Leader Achievement-Oriented Behavior and the satisfaction factors.

Satisfaction at Selected Occupational Levels

The data in Table 36 show that Leader Achievement-Oriented Behavior was positively correlated with all types of satisfaction at the administrative, professional and clerical occupational levels. However, no substantial relationships were found between Leader Achievement-Oriented Behavior and the Intrinsic Satisfaction of subordinates. The correlation between Leader Achievement-Oriented Behavior and Intrinsic Satisfaction was highest at the professional level (r = .34). In contrast, the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction were substantial. For example, at the professional level the correlation coefficient was r = .77. In particular, the amount of variance accounted for by Leader Achievement-Oriented Behavior was substantially greater at the professional and administrative occupational levels (fifty-nine and fifty-five percent respectively) than at the clerical level (thirty-seven percent). Occupational level was therefore associated with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction.

ROLE PERCEPTIONS

To investigate the association of role perceptions with moderation of the relationships between the satisfaction of subordinates and Leader Achievement-Oriented Behavior, the 149 respondents were divided into three approximately equal groups, as described in Chapter VIII. Tables 37 and 38 present partial correlation coefficients for differing Role Conflict and Role Ambiguity personnel groups respectively.

Satisfaction in Differing Role Conflict Groups

The data in Table 37 show that no substantial relationships existed between Leader Achievement-Oriented Behavior and Intrinsic Satisfaction among school system personnel. The absence of substantial relationships was found irrespective of perceptions of Role Conflict. These findings suggested that Role Conflict was not associated with moderation of relationships between Leader Achievement-Oriented Behavior and Intrinsic Satisfaction.

In contrast, Leader Achievement-Oriented Behavior was positively and substantially correlated with the Extrinsic Satisfaction of all respondents in the school system. For example, the correlation coefficient at the administrative level was r = .63. Furthermore, the amount

TABLE 37

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND SATISFACTION FOR DIFFERING ROLE CONFLICT GROUPS (N=149)

Type of Satisfaction	Role Conflict High** (n=50)	 Medium** (n=52)	 Low** (n=47)
Intrinsic	.02	-.06	.04
Extrinsic	.63	.60	.40
General	.30	.23	.26

*Directive and Participative Leader Behavior held constant.

**"High" scores were 31-47; "Medium" scores were 22-30; "Low" scores were 8-21.

TABLE 38

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND SATISFACTION FOR DIFFERING ROLE AMBIGUITY GROUPS (N=149)

Type of Satisfaction	Role Ambiguity High** (n=43)	 Medium** (n=61)	 Low** (n=45)
Intrinsic	.13	-.06	.10
Extrinsic	.71	.58	.52
General	.37	.33	.34

*Directive and Participative Leader Behavior held constant.

**"High" scores were 19-34; "Medium" scores were 13-18; "Low" scores were 6-12.

of variance in Extrinsic Satisfaction accounted for by Leader Achievement-Oriented Behavior was substantially greater under conditions of high Role Conflict (forty percent) than low Role Conflict (sixteen percent). In this sense, Role Conflict was associated with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction among school system personnel.

Satisfaction in Differing Role Ambiguity Groups

The data in Table 38 show that, irrespective of perceptions of Role Ambiguity, no substantial relationships between Leader Achievement-Oriented Behavior and Intrinsic Satisfaction were found. These findings suggested that Role Ambiguity was not associated with moderation of the relationships investigated.

Positive and substantial relationships were found between Leader Achievement-Oriented Behavior and the Extrinsic Satisfaction of all respondents in the school system. For example, the correlation coefficient at the administrative level was $r = .71$. In addition, the amount of variance in the Extrinsic Satisfaction of subordinates accounted for by Leader Achievement-Oriented Behavior was substantially greater in the high Role Ambiguity group (fifty percent) than in the low Role Ambiguity group (twenty-seven percent). For these reasons, Role Ambiguity was judged to be associated with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction.

TASK CHARACTERISTICS

To investigate the association of task characteristics with moderation of relationships between Leader Achievement-Oriented Behavior and types of satisfaction, the 149 respondents were divided into three approximately equal groups, as described in Chapter VIII.

Satisfaction in Differing Task Structure Groups

Table 39 comprises partial correlation coefficients between Leader Achievement-Oriented Behavior and the satisfaction of subordinates grouped according to scores on the Task Structure Scale.

TABLE 39

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND SATISFACTION FOR DIFFERING TASK STRUCTURE GROUPS (N=149)

Type of Satisfaction	Task Structure High** (n=49	 Medium** (n=54)	 Low** (n=46)
Intrinsic	.32	-.06	.12
Extrinsic	.67	.56	.68
General	.54	.22	.44

*Directive and Participative Leader Behavior held constant.

**"High" scores were 18-25; "Medium" scores were 14-17; "Low" scores were 5-13.

No substantial relationships were found between Leader Achievement-Oriented Behavior and the Intrinsic Satisfaction of school system personnel. In contrast, Leader Achievement-Oriented Behavior was positively and substantially correlated with Extrinsic and General Satisfaction. The highest correlation coefficient obtained was between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction for the low Task Structure group (r = .68). However, the amount of variance in Extrinsic Satisfaction of subordinates accounted for by Leader Achievement-Oriented Behavior was similar in groups scoring high (forty-six percent) and low (forty-five percent) on the Task Structure Scale. Task Structure did not seem to be associated with moderation of relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction.

Satisfaction in Differing Task Repetitiveness Groups

Partial correlation coefficients between Leader Achievement-Oriented Behavior and types of satisfaction of subordinates divided according to scores on the Task Repetitiveness are reported in Table 40.

The correlation between Leader Achievement-Oriented Behavior and the Intrinsic Satisfaction of subordinates was inconsequential, but Leader Achievement-Oriented Behavior was positively and substantially correlated with Extrinsic Satisfaction as well as General Satisfaction. The highest correlation coefficient

TABLE 40

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND SATISFACTION FOR DIFFERING TASK REPETITIVENESS GROUPS (N=149)

Type of Satisfaction	Task Repetitiveness		
	High** (n=43)	Medium** (n=60)	Low** (n=46)
Intrinsic	.23	.25	.27
Extrinsic	.67	.64	.69
General	.50	.50	.51

*Directive and Participative Leader Behavior held constant.

**"High" scores were 17-25; "Medium" scores were 12-16; "Low" scores were 6-11.

obtained was between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction for the low Task Repetitiveness group (r = .69). However, the amount of variance in Extrinsic Satisfaction accounted for by Leader Achievement-Oriented Behavior was similar in groups scoring high (forty-five percent) and low (forty-eight percent) on the Task Repetitiveness Scale. Task Repetitiveness did not appear to be associated with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction.

Satisfaction in Differing Task Autonomy Groups

Table 41 comprises partial correlation coefficients between Leader Achievement-Oriented Behavior and the satisfaction of school system personnel who were grouped according to their scores on the Task Autonomy Scale.

TABLE 41

PARTIAL CORRELATION COEFFICIENTS* BETWEEN LEADER ACHIEVEMENT-ORIENTED BEHAVIOR AND SATISFACTION FOR DIFFERING TASK AUTONOMY GROUPS (N=149)

Type of Satisfaction	Task Autonomy		
	High** (n=50)	Medium** (n=58)	Low** (n=41)
Intrinsic	.45	.28	-.07
Extrinsic	.77	.70	.38
General	.69	.51	.12

*Directive and Participative Leader Behavior held constant.

**"High" scores were 21-25; "Medium" scores were 17-20; "Low" scores were 6-16.

A positive and substantial relationship between Leader Achievement-Oriented Behavior and the Intrinsic Satisfaction of subordinates who had high Autonomy in the performance of their tasks was found (r = .45), but personnel engaged in tasks with low Autonomy were not intrinsically satisfied with Leader Achievement-Oriented

Behavior (r = -.07). These findings suggested that Task Autonomy was associated with moderation of the relationships between Leader Achievement-Oriented Behavior and Intrinsic Satisfaction.

Positive and substantial relationships were found between Leader Achievement-Oriented Behavior and the Extrinsic Satisfaction of all respondents. For example, the correlation coefficient at the administrative level was r = .77. However, the amount of variance in Extrinsic Satisfaction accounted for by Leader Achievement-Oriented Behavior differed substantially between high Autonomy (fifty-nine percent) and low Task Autonomy (fourteen percent) groups. These findings suggested that Task Autonomy was also associated with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction. Further, differences among personnel groups in the amount of variance in General Satisfaction accounted for by Leader Achievement-Oriented Behavior indicated that Task Autonomy was associated with moderation of these relationships.

DISCUSSION OF THE FINDINGS

As in the two previous chapters, the discussion of findings is divided into two parts. Initially, the findings are synthesized and interpreted in terms of implications for school system personnel and then the findings are related to Path-Goal Theory propositions. Because

Leader Achievement-Oriented Behavior is not identical with behavior investigated in other studies, comparisons are discussed in the concluding chapter.

Interpreting the Findings

The first major discussion point to emerge from these analyses was that the only substantial correlation between Leader Achievement-Oriented Behavior and Intrinsic Satisfaction was found in the group scoring high on the Task Autonomy Scale.

Intrinsic Satisfaction, which is self- or task-mediated, did not seem to be associated with leader behavior characterized by setting expectations and assisting personnel to meet these expectations among school system personnel. This was true for the administrative, professional and clerical levels, among groups divided according to scores on Role Conflict and Ambiguity Scales, and groups divided according to scores on Task Structure and Repetitiveness Scales. Furthermore, no support was found to suggest that Role Conflict and Role Ambiguity, or Task Structure and Task Repetitiveness was associated with moderation of the relationships between the Intrinsic Satisfaction of subordinates and Leader Achievement-Oriented Behavior.

Nor was evidence found to suggest that personnel in the school system were dissatisfied with Leader Achievement-Oriented Behavior. Neither satisfaction nor dissatisfaction appeared to be expressed with Leader Achievement-Oriented Behavior on measures of Intrinsic Satisfaction. These findings suggested that personnel in the school system may tolerate being told what is expected of them as an integral part of their work without reacting in any particular way in terms of feelings about it.

Of the three task characteristics investigated, only Task Autonomy was associated with moderation of the relationships between Leader Achievement-Oriented Behavior and Intrinsic Satisfaction. Although no substantial correlation between Leader Achievement-Oriented Behavior and Intrinsic Satisfaction was found in the low Task Autonomy group, a substantial positive correlation was found in the high Task Autonomy group. Task Autonomy was positively and substantially related to Intrinsic Satisfaction at the administrative level (see Table 19, p.143). Moreover, as stated in Chapter VI, administrative personnel were found to have high levels of freedom to make decisions regarding the performance of tasks (see Table 10, p.127). These findings, taken together, suggested that the establishment of performance standards for personnel engaged in highly autonomous tasks may be regarded as an important feature of this type of work, and therefore, Achievement-Oriented Behavior is intrinsically satisfying.

The second major discussion point to emerge from the analyses was that Leader Achievement-Oriented Behavior was positively and substantially correlated with the Extrinsic Satisfaction of school system personnel irrespective of the way respondents were grouped. Leader Achievement-Oriented Behavior was associated with feelings of satisfaction on facets such as the way supervisors handle their employees, the competence of the supervisor, pay and the amount of work done and praise given for doing a good job. These findings applied to personnel irrespective of occupational level, role perceptions or task characteristics in the school system. Leader Achievement-Oriented Behavior was an important source of Extrinsic Satisfaction for all respondents.

The third major discussion point to emerge from the analyses was that Occupational Level, Role Conflict and Ambiguity, and Task Autonomy were associated with the moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction. Task Structure and Task Repetitiveness were not associated with moderation of these relationships.

The differences in the amount of variance in Extrinsic Satisfaction accounted for by Leader Achievement-Oriented Behavior noted when the clerical level was compared to the administrative and professional levels seemed to be reflected in differences in perceptions of Role Conflict and Ambiguity, and Task Autonomy. Table 9 on page 123 shows that perceptions of Role Conflict and Ambiguity were substantially lower at the clerical level, and Table 10 on page 127 shows that Task Autonomy was lower at the clerical level than at the professional and administrative level. Moreover, Table 36 on page 193 shows that the correlation between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction was substantially lower at the clerical level than at either the administrative or professional level. These findings, taken together, suggested that lower correlation coefficients between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction could have been expected under conditions of low Role Conflict and Ambiguity and among personnel with low Task Autonomy. The data summarized in Tables 37, 38 and 41 confirmed these expectations. In this sense, moderation of relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction was associated with different perceptions of Role Conflict and Ambiguity, and Task Autonomy at the selected occupational levels.

Similarly, lower correlation coefficients between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction might have been expected in high Task Repetitiveness and Structure groups than in low Task Repetitiveness and Structure groups. However, as shown in Tables 39 and 40, these expectations were not borne out. Task Repetitiveness and Structure were not associated with moderation of these relationships.

The association of Role Conflict with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction may be explained in terms of the complex interrelationships between these three factors among school system personnel. As stated in Chapter VI, the major sources of conflict were derived from the requirements to work in two or more groups who operate quite differently and from differing standards of evaluation applied to work done. Leader Achievement-Oriented Behavior was associated with reduced conflict from these sources, as indicated in Table 13 on page 136. Moreover, as shown in Table 15 on page 140, Role Conflict was negatively correlated with Extrinsic Satisfaction. These findings, taken together, suggested that since Leader Achievement-Oriented Behavior was associated with reduced role conflict, this kind of behavior could be expected to be most intrinsically satisfying to those subordinates who perceived high levels of conflict in their work. Data reported in Table 37 confirmed this expectation.

The association of Role Ambiguity with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction may be explained in a similar way. Leader Achievement-Oriented Behavior was associated with reduced Role Ambiguity, that is, as indicated in Chapter VI, increased clarity of work goals and explanation of what has to be done in the school system. Therefore, Leader Achievement-Oriented Behavior was expected to be most extrinsically satisfying to those subordinates who perceived high levels of ambiguity in their work. The data reported in Table 38 supported this interpretation.

The association of Task Autonomy with moderation of the relationships between Leader-Achievement Oriented Behavior and Extrinsic Satisfaction require different explanation. Table 13 on page 136 shows no substantial correlation between Leader Achievement-Oriented Behavior and Task Autonomy. Similarly, Table 19 on page 143 shows no substantial correlation between Task Autonomy and Extrinsic Satisfaction. However, personnel who had the freedom to make most of the decisions regarding the performance of their own tasks expressed more satisfaction on extrinsic facets than personnel with less Task Autonomy. The complex interaction noted with respect to role perceptions was not found with respect to Task Autonomy. These findings may be reflected in the technological nature of the task dimensions in contrast to the social nature of the role perceptions as moderators of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction.

Findings Related to the Path-Goal Theory

These findings with respect to relationships between Leader Achievement-Oriented Behavior and types of satisfaction seem to be consistent with Path-Goal Theory of Leadership propositions. Leader behavior characterized by letting group members know what is expected of them, explanation of tasks and assisting subordinates to overcome task problems, that is, Achievement-Oriented Behavior may be regarded as nondirective path- and goal-clarifying behavior.

House and Mitchell (1974:88) state that leader behavior which helps subordinates cope with environmental uncertainties, threats from others or sources of frustration is predicted to increase subordinates' satisfaction with the job context. Achievement-Oriented Behavior is similar to the kind of leader behavior described, and therefore increased satisfaction with the job context, that is, increased Extrinsic Satisfaction, could have been expected. These expectations were borne out in this study of school system personnel.

Path-Goal Theory, as described by House and Dessler (1974:33), also proposes that constraints are motivational and satisfying to the extent that they prevent the subordinate from experiencing role conflict and ambiguity. Leader Achievement-Oriented Behavior imposes constraints on subordinates by letting group members know what is expected of them and by indicating the way tasks should be carried out. Among school system personnel, Leader Achievement-Oriented Behavior was found to be associated with reduced Role Conflict and Ambiguity. Moreover, Leader Achievement-Oriented Behavior was found to be associated with the Extrinsic Satisfaction of subordinates. Furthermore, those school system personnel who perceived the highest levels of Role Conflict and Ambiguity were more satisfied with Leader Achievement-Oriented Behavior than others. These findings were supportive of the proposition that leader behavior which constrains the behavior of subordinates, thus reducing role conflict and ambiguity, is satisfying to subordinates. In this sense, the findings were supportive of the Path-Goal Theory of Leadership.

Finally, school system personnel who were autonomous in the performance of their own tasks were intrinsically satisfied with Leader Achievement-Oriented Behavior. Moreover, with respect to Extrinsic Satisfaction, those personnel with high Task Autonomy were more satisfied with Leader Achievement-Oriented Behavior than those with low Task Autonomy. These findings are consistent with the proposition, as stated by House and Mitchell (1974:84), that a strategic function of a leader is to increase opportunities for personal satisfaction contingent upon the attainment of organizational goals. Autonomous personnel seem to require direction towards the attainment of these goals. By letting group members know what is expected of them, Leader Achievement-Oriented Behavior provides the direction needed. Thus, by providing the necessary stimuli and constraints on variable performance, Leader Achievement-Oriented Behavior makes up for deficiencies in the environment of autonomous subordinates. These provisions help subordinates clarify expectations that effort leads to rewards required for satisfaction with the job. In contrast to subordinates with high Task Autonomy, those subordinates with low Task Autonomy experience fewer deficiencies in the environment with respect to motivational stimuli and constraints required for the attainment of organizational goals, and therefore Leader Achievement-Oriented Behavior is less satisfying.

Statement of Tentative Hypotheses

Findings in this study which were consistent with Path-Goal Theory predictions formed the basis of several tentative hypotheses. The following hypotheses were formulated in order that they might be tested in other studies:

1. Leader Achievement-Oriented Behavior is positively correlated with the Extrinsic Satisfaction of subordinates.

2. A higher positive correlation between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction occurs in high Role Conflict personnel groups than in low Role Conflict personnel groups.

3. A higher positive correlation between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction occurs in high Role Ambiguity personnel groups than in low Role Ambiguity personnel groups.

4. A higher positive correlation between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction occurs in high Task Autonomy personnel groups than in low

Task Autonomy personnel groups.

5. Leader Achievement-Oriented Behavior is positively correlated with the Intrinsic Satisfaction of subordinates who have high Task Autonomy but not among those having low Task Autonomy.

SUMMARY

Three important points emerged from the discussion of the findings with respect to relationships between Leader Achievement-Oriented Behavior and types of satisfaction. First, only one substantial correlation coefficient was found between Leader Achievement-Oriented Behavior and the Intrinsic Satisfaction of school system personnel. This related to personnel who had most freedom to make decisions concerning the performance of their own tasks. Second, Leader Achievement-Oriented Behavior was positively and substantially correlated with the Extrinsic Satisfaction of all respondents. Finally, Occupational Level, Role Conflict and Ambiguity, and Task Autonomy were associated with moderation of the relationships between Leader Achievement-Oriented Behavior and the Extrinsic Satisfaction of school system personnel.

The association of Role Conflict and Ambiguity with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction may be explained in terms of the complex interrelationships between these factors. School system personnel who experienced the highest levels of Role Conflict and Ambiguity were most satisfied with Leader Achievement-Oriented Behavior, since this kind of leader behavior was associated with reduced conflict and ambiguity.

Subordinates in the school system who had the highest amount of Task Autonomy were most satisfied with Leader Achievement-Oriented Behavior. Leader behavior described as setting expectations for performance and assisting subordinates to fulfil these expectations seemed to be a necessary part of the work environment for the extrinsic satisfaction of subordinates who had considerable freedom to make decisions regarding the performance of their own tasks.

These findings were consistent with predictions which could have been made from the Path-Goal Theory of Leadership. Tentative hypotheses for testing in later studies were formulated on the basis of findings in this study and discussion of Path-Goal Theory predictions.

CHAPTER XI

GENERAL DISCUSSION, CONCLUSIONS AND IMPLICATIONS

In this chapter, findings relating to the satisfaction of school system personnel with three kinds of leader behavior, namely, Directive, Participative and Achievement-Oriented Behavior are summarized and reported as a whole. The general discussion which follows is an attempt to synthesize these findings and to interpret them in terms of their implications for educational administration. In particular, the applicability of the Path-Goal Theory of Leadership to the school system is examined.

Initially, the findings are interpreted in terms of the association of selected contingency factors with moderation of relationships between leader behavior and the satisfaction of subordinates. These findings are then compared with findings from other studies. A comment about the appropriateness of the satisfaction dimensions follows. The next section is devoted to a discussion of the findings relating to leader behaviors and Path-Goal Theory propositions relevant to these behaviors. The promise of Path-Goal Theory is then discussed and the major conclusions of this study are presented in this context. Finally, the implications of the findings for practice and research are outlined.

STATEMENT OF FINDINGS

The first general hypothesis formulated for testing in this study was stated as follows:

> The type (positive or negative) and degree of association between leader behaviors and the satisfaction of subordinates differs according to subordinates' perceptions of (1) role conflict and ambiguity and (2) the task characteristics, structure, repetitiveness and autonomy.

Support was found for this general hypothesis. The specific findings relevant to this hypothesis were discussed and presented in Chapters VIII, IX and X. These findings, which relate to personnel in the school system under study, are summarized as follows:

1) No substantial positive relationships between Leader Directive Behavior and types of satisfaction of subordinates were found in any personnel group.

2) Leader Directive Behavior was substantially and negatively correlated with the General Satisfaction of clerical personnel.

3) Leader Directive Behavior was substantially and negatively correlated with the Intrinsic, Extrinsic and General Satisfaction of subordinates engaged in highly repetitious tasks, and with the Extrinsic Satisfaction of subordinates who had low Task Autonomy.

4) Leader Participative Behavior was positively and substantially correlated with the Extrinsic Satisfaction of subordinates irrespective of the way in which respondents were grouped.

5) Leader Participative Behavior was substantially and positively correlated with the Intrinsic Satisfaction of clerical and administrative personnel but not professional personnel.

6) Leader Participative Behavior was substantially and positively correlated with the Intrinsic Satisfaction of subordinates engaged in repetitious and structured tasks but not varied and unstructured tasks.

7) Leader Participative Behavior was substantially and positively correlated with Intrinsic Satisfaction in the low Role Conflict group but not in the high Role Conflict group.

8) Leader Achievement-Oriented Behavior was substantially and positively correlated with Intrinsic Satisfaction only in the high Task Autonomy personnel group.

9) Leader Achievement-Oriented Behavior was positively and substantially correlated with the Extrinsic Satisfaction of subordinates irrespective of the way in which respondents were grouped.

10) A substantially higher positive correlation between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction occurred among personnel who perceived the highest levels of Role Conflict and Ambiguity than among those personnel who perceived the lowest levels of Role Conflict and Ambiguity.

11) A substantially higher positive correlation between Leader Achievement-Oriented Behavior and Extrinsic

Satisfaction occurred among personnel who were most autonomous in the performing of tasks than among those with the least autonomy.

The modified summary statement of the Path-Goal Theory of Leadership adopted for this study, and presented in Figure 2 in Chapter III, asserted that Leader Behavior and selected Contingency factors are associated with specified types of satisfaction of subordinates. In the following section these eleven statements are interpreted in terms of this assertion.

CONTINGENCY FACTORS

House and Mitchell (1974:85) state that a contingency factor is a variable which moderates the relationship between two other variables such as leader behavior and the satisfaction of subordinates. In this study occupational level, role perceptions of subordinates and the characteristics of subordinates' tasks were predicted to be associated with the moderation of relationships between leader behavior and the satisfaction of subordinates in the school system.

Role Perception

Two role factors were proposed as contingency factors in this study, namely, Role Conflict and Role Ambiguity. Neither of these factors was found to be associated with moderation of the relationships between Leader Directive Behavior and subordinates' satisfaction.

However, Role Conflict was found to be associated with moderation of relationships between Leader Participative Behavior and Intrinsic Satisfaction. Among school system personnel a substantial positive relationship was found in the low Role Conflict group, but not in the high Role Conflict group. Both Role Conflict and Role Ambiguity were associated with moderation of relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction. Leader Achievement-Oriented Behavior was found to be more satisfying on extrinsic facets of satisfaction to those persons experiencing high Role Conflict and Ambiguity than to those who perceived low levels of Role Conflict and Ambiguity.

These findings suggested that variance in Role Conflict seemed to be more important than Role Ambiguity in accounting for differences in relationships between leader behavior and subordinates' satisfaction in the school system. Most noteworthy, however, is the indication that differences in the complex interactions among leader behavior, role and satisfaction factors appeared to be associated with specific kinds of leader behavior.

Leader behavior characterized by letting personnel know what is expected of them, setting definite standards of performance, and assisting subordinates to overcome task problems was especially extrinsically satisfying to those perceiving the highest levels of role conflict and ambiguity. In the school system, personnel perceiving the highest levels of role conflict and ambiguity were mostly the administrative and professional personnel. Although generalization beyond school system personnel in this study was not warranted, these findings suggest that leader behavior oriented towards achievement may be associated with the extrinsic satisfaction of comparable central office personnel in other systems who also experience high role conflict and ambiguity. Similarly, leader behavior characterized by consulting with subordinates before taking action may be intrinsically satisfying to comparable central office personnel in other systems who experience relatively low levels of role conflict.

Task Characteristics

Three dimensions of task characteristics were proposed as contingency factors in this study, namely, Task Structure, Task Repetitiveness and Task Autonomy. Of these three factors, only Task Repetitiveness was associated with moderation of the relationships between Leader Directive Behavior and the three types of subordinates' satisfaction. Substantial negative relationships between Leader Directive Behavior and the three satisfaction factors, Intrinsic, Extrinsic and General Satisfaction were found among subordinates engaged in repetitious tasks but not among subordinates engaged in varied tasks. Similarly, a substantial negative relationship was found between Leader Directive Behavior and Extrinsic Satisfaction among personnel engaged in structured tasks but not unstructured tasks.

None of the three task factors was associated with moderation of the relationships between Leader Participative Behavior and Extrinsic Satisfaction. However, Task Structure and Task Repetitiveness were associated with moderation of relationships between Leader Participative Behavior and Intrinsic Satisfaction. No substantial positive relationships were found between Leader Participative Behavior and the Intrinsic Satisfaction of subordinates engaged in varied, unstructured tasks, but where subordinates performed repetitious, structured tasks, Leader Participative Behavior was found to be intrinsically satisfying.

In contrast to the above findings, Task Autonomy was associated with moderation of the relationships between Leader Achievement-Oriented Behavior and the satisfaction of subordinates but Task Repetitiveness and Task Structure were not. Leader Achievement-Oriented Behavior had a substantially higher positive correlation with Intrinsic and Extrinsic Satisfaction among personnel who had most autonomy than among personnel with the least autonomy in the performance of tasks.

These findings suggested that differences in relationships between leader behaviors and the satisfaction of subordinates, according to differing perceptions of task characteristics, appeared to be associated with specific kinds of leader behavior. Among school system personnel, the structure and repetitiveness of tasks was associated with moderation of relationships between the satisfaction of subordinates and leader directiveness, as well as participative leader behavior. However, the autonomy of personnel in performance of their own tasks was associated with moderation of relationships between the satisfaction of subordinates and leader behavior oriented towards the achievement of tasks.

Care must be exercised in interpreting the meaning of these findings for personnel in the central offices of other education systems. However, to the extent that personnel in other systems are like those in the system studied, some implications may be drawn. Leader behavior oriented towards the achievement of tasks may be more satisfying to personnel who are autonomous in the performance of their tasks than to personnel who do not have high task autonomy. The most autonomous personnel are likely to be senior administrative and professional staff rather than clerical staff. Moreover, leader behavior characterized by consulting with staff before the leader takes action, may be most intrinsically satisfying to system personnel whose tasks are relatively structured and repetitious, for example, clerical personnel. However, leader directiveness may be dissatisfying to persons such as clerical personnel whose tasks are more structured and repetitious than the tasks of others.

Occupational Level

The occupational level from which personnel in the school system were drawn for this study seemed to be associated with moderation of the relationships of leader behavior and the satisfaction of subordinates. Substantial dissatisfaction with Leader Directive Behavior was found among clerical personnel, but no substantial relationships between Leader Directive Behavior and the satisfaction of subordinates were found among administrative and professional personnel. Leader Participative Behavior was substantially and positively correlated with Extrinsic and General Satisfaction irrespective of occupational level. However, Leader Participative Behavior was found to be intrinsically satisfying to clerical and administrative personnel but not to professional personnel. A substantially higher positive correlation was found between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction at the administrative and professional levels than among clerical personnel.

As suggested in Chapters VIII, IX and X, the association of occupational level with moderation of the relationships between the satisfaction of subordinates and leader behavior seemed to be related to differences in role perceptions and task characteristics among school system personnel. This point is alluded to in the above section and is further amplified when comparisons of findings with other studies are made.

Comparison with Other Studies

Several of the factors described as contingency factors in this study were also investigated as contingency factors in other studies. House (1971:328) found that statistically significant correlations between Initiating Structure and facets of satisfaction such as advancement opportunity, intrinsic job rewards, recognition and the social environment disappeared when Role Ambiguity was partialled out. A similar finding was reported among administrative personnel in a health-care unit by Szilagyi and Sims (1974:630). Furthermore, Sims and Szilagyi (1975:434) found that Role Ambiguity moderated relationships between Leader Reward Behavior and satisfaction. These findings bear some resemblance to the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction found in this study. Variance in Role Ambiguity was associated with substantial differences in the correlation between Leader Achievement-Oriented Behavior and facets of satisfaction such as the way supervisors handle employees, the competence of the supervisor, pay and the amount of work done and praise given for a good job.

However, Szilagyi and Sims (1974:630) reported that Role Ambiguity did not moderate relationships between Leader Consideration Behavior and subordinates' satisfaction. Consideration had a positive and uniformly substantial correlation with the satisfaction of all subordinates. This finding seems to be similar to the findings in this study that positive and substantial correlations occurred between Leader Participative Behavior and all types of satisfaction of subordinates irrespective of perceptions of Role Ambiguity.

None of the several studies reviewed in Chapter III investigated the moderating effects of Role Conflict. However, in this study variance in Role Conflict was found to account for differences in relationships between Leader Participative Behavior and Intrinsic Satisfaction, as well as relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction. In contrast to Rizzo et al. (1970:162), Schuler et al. (1977:125) argue that Role Conflict seemed to be just as important as Role Ambiguity in organizational behavior. Findings in this study at least supported this latter view, and seemed to suggest that Role Conflict was more important.

The chief sources of role conflict among school system personnel related to conflicting expectations as a result of membership in several different work groups and varying standards of evaluation applied to the work of members of the groups. These findings suggested that the nature of work required from central office personnel may be such that persons are required to work in several different groups. If this is correct, role conflict may be an inevitable part of the work environment. To the extent that other systems of administration of education are similar to the system studied, role conflict may be regarded as an important component of any model of organizational behavior for systems of education.

Several studies have tested the moderating effects of various task characteristics on the association of leader behavior with the satisfaction of subordinates (see Chapter III). However, as Schriesheim and Von Glinow (1977:400) point out, these findings are inconsistent.

In the school system studied very substantial and positive correlations were found between Leader Participative Behavior and Extrinsic Satisfaction, irrespective of the way personnel groups were formed. These findings seemed similar to those of Szilagyi and Sims (1974:630) who found equally substantial positive correlations between leader Consideration and the satisfaction of subordinates, irrespective of the characteristics of tasks performed at four occupational levels. Nevertheless, associations of task characteristics with moderation of relationships between leader behavior and the satisfaction of subordinates similar to those found in the studies reviewed in Chapter III were found in this study. House and Dessler (1974:54), Greene (1974:47), and Stinson and Johnson (1975a:248) found that Task Structure moderated relationships between various facets of satisfaction and supportive leadership. In a comparable sense, more task variety and less structure was accompanied by substantially reduced correlations between Leader Participative Behavior and Intrinsic Satisfaction among school system personnel.

Schriesheim and Von Glinow (1977:400) point out that findings relating to correlations between Instrumental Leadership or Directive Leadership and various facets of job satisfaction are also inconsistent. In this study, Leader Directive Behavior had a substantial negative correlation with all types of satisfaction of subordinates engaged in repetitive tasks, but an inconsequential positive correlation with all types of satisfaction of subordinates engaged in varied tasks. Similarly, House and Dessler (1974:50), using a task structure scale which comprised items describing task repetitiveness as well as structure, reported findings with respect to relationships between Instrumental Leadership and Intrinsic as well as Extrinsic Satisfaction which parallel those of this study. Furthermore, the findings reported by House (1971:335) that job autonomy moderated relationships between Initiating Structure and satisfaction is reflected in the association of Task Autonomy with moderation of the relationships between Leader Achievement-Oriented Behavior and satisfaction found in this study. However, most findings in this study could not be compared with findings in other studies because two differing specific leader behavior factors, both incorporating items from the LBDQ-XII Initiating Structure dimension, emerged from the factor analysis of responses of school system personnel. Each of these leader behavior factors was differentially related to the satisfaction of subordinates.

The other contingency factor investigated in this study, occupational level, was also investigated in other studies. Szilagyi and Sims (1974:622-634) and Downey et al. (1975:253-262) found support for the moderating effects of occupational level, but Dessler and Valenzi (1977:251-259) did not find support for their hypothesis. In the study of school system personnel, occupational level was found to be associated with moderation of the relationships between Leader Directive Behavior and General Satisfaction, Leader Participative Behavior and Intrinsic Satisfaction, and Leader Achievement-Oriented Behavior and Extrinsic Satisfaction. Szilagyi and Sims (1974:630) attributed the moderating effects of occupational level to variance in role ambiguity among subjects, whereas Downey et al. (1975:256) attributed differences between occupational levels to differences in task structure. In the school system studied, the association of occupational level with moderation of relationships between leader behavior and types of satisfaction seemed to be related to differing role perceptions and task characteristics. First, differences between clerical personnel and others with respect to relationships between Leader Directive Behavior and General Satisfaction seemed to be associated with Task Repetitiveness. Second, the differences between professional personnel and others with respect to relationships between Leader Participative Behavior and Intrinsic Satisfaction appeared to be attributable to Task Structure, Task Repetitiveness and Role Conflict. Finally, the differences between clerical personnel and others with respect to relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction seemed to be associated with Role Conflict, Role Ambiguity and Task Autonomy.

SATISFACTION

House and Dessler (1974:29-30) suggested that attempts to explain the effects of leader behavior have led to confusing and conflicting findings partly because studies focussed on measures of overall satisfaction. Leader behavior was claimed to have its most direct effects on specific psychological states, and therefore global variables such as overall satisfaction confounded research findings. In this study a global factor, General Satisfaction, was used as well as two more specific satisfaction factors, namely, Intrinsic and Extrinsic Satisfaction. The General Satisfaction Scale incorporated items used to measure Intrinsic and Extrinsic Satisfaction.

Support for the House and Dessler (1974:29-30) position was found in this study. Confusing and inconsequential correlations between Leader Participative Behavior and General Satisfaction, as well as between

Leader Achievement-Oriented Behavior and General Satisfaction, were found.

In contrast, several findings in this study of school system personnel illustrated the differing relationships between particular types of satisfaction and specific kinds of leader behavior. Leader Participative Behavior was positively and substantially correlated with the Extrinsic Satisfaction of all personnel, but differences in relationships between Participative Behavior and Intrinsic Satisfaction were associated with various contingency factors. Moreover, Leader Achievement-Oriented Behavior was not substantially correlated with Intrinsic Satisfaction except in the high Task Autonomy group, but Leader Achievement-Oriented Behavior was substantially correlated with the Extrinsic Satisfaction of all personnel, although to varying degrees.

LEADER BEHAVIOR

In this section interrelationships between the three kinds of leader behavior which emerged as factors in this study, namely, Participative, Achievement-Oriented and Directive Behavior, are discussed in the light of findings in other studies. The nature of these leader behavior factors is then discussed. For the purposes of this discussion a classification of patterns of leader behavior referred to by Stogdill (1974,418) is used. Democratic, permissive, follower-oriented, participative and considerate patterns are often regarded as a cluster of similar person-oriented behaviors. Likewise, autocratic, restrictive, task-oriented, socially distant, directive and structured patterns are regarded as work-oriented leader behaviors. Leader Participative Behavior is viewed as a person-oriented type of behavior whereas Leader Achievement-Oriented and Directive Behaviors are regarded as work-oriented. Finally, findings associated with these three kinds of leader behaviors are discussed in the context of the Path-Goal Theory of Leadership.

Interrelationships among Leader Behaviors

An oblique factor solution of the responses of 149 school system personnel to the Leader Behavior Questionnaire resulted in the emergence of three factors labelled Leader Participative Behavior, Leader Achievement-Oriented Behavior and Leader Directive Behavior. As indicated in Chapter V, oblique factors are empirically more realistic than orthogonal factors, but they are correlated. However, even orthogonal leader behavior factors seem to be correlated with one another. Following a review of several studies, Kerr et al. (1974:63) state that the leader behavior dimensions, Consideration and Initiating Structure, often fail to be independent and may in fact be negatively correlated. Comparable findings in this study were the negative, substantial correlations found between Leader Participative Behavior and Leader Achievement-Oriented Behavior among administrative, professional and clerical personnel.

As suggested by Kerr et al. (1974:63), these findings may reflect the realities of the environment being studied or may result instead from respondent inability to consider the two dimensions separately. According to Schriesheim and Kerr (1974:761), inability to discriminate between dimensions may be due to the failure of respondents to separate individual dimensions from an overall impression or evaluation, that is, a halo response may be observed. Some evidence of a halo response was found in this study. At the clerical level a positive, substantial correlation between Leader Participative Behavior and Leader Directive Behavior and a negative, substantial correlation between Leader Achievement-Oriented Behavior and Leader Directive Behavior were found. The corresponding correlations at the administrative and professional levels were inconsequential. Administrative and professional personnel seemed better able to discriminate leader behavior dimensions. However, negative, substantial correlations between Leader Participative Behavior and Leader Achievement-Oriented Behavior at all occupational levels suggest that this relationship is reflected in the realities of the work environment in the school system.

Person-Oriented Leader Behavior

House and Dessler (1974:43) developed a Supportive Leadership Scale which incorporated LBDQ-XII Consideration behavior items and a Participative Leadership Scale which included some Consideration behavior items plus items specifically developed for their study. However, factor analysis of the responses of school system personnel to the same items resulted in all Participative Leadership Scale items and most Supportive Leadership Scale items loading on Factor I, subsequently named Leader Participative Behavior. Respondents seemed unable to discriminate between considerate and participative leader behaviors. This finding supports the clustering of considerate and participative leader behavior items, together with other similar behaviors, as person-oriented leader behavior items in the way described by Stogdill (1974:418).

Although Factor I was labelled Leader Participative Behavior primarily because the Participative Leadership Scale items loaded highest on this factor, these findings raise the questions: What is participative leadership? and How is participative behavior related to considerate behavior? The item which loaded highest on Factor I was a Participative Leadership Scale item, namely, "Before taking action he consults with subordinates." This item, which is representative of all the Participative Leadership Scale items, emphasizes the consultative nature of leader behavior. Consultative behavior still leaves making decisions and taking action with the leader, not with subordinates either individually or as a group.

Miles (1974:257) described this kind of leadership behavior as the human relations approach, the key element of which is its basic objective of making organizational members feel useful and important, but decision-making prerogatives remain with the leader. In contrast, the human resources approach to participative leadership suggests that many decisions may actually be made by those directly involved in and affected by decisions. Similar distinctions were made in the contingency model of leadership presented by Vroom and Yetton (1973:11) who argue that particular problems and situations determine the form and amount of participation in decision-making by subordinates. Alternative decision-making styles have one of four basic properties: autocratic, consultative, group and delegated. Group decision-making involves the leader in sharing the problems with members of a group and together making a decision or taking action, and delegated decision-making requires that members of the work unit make decisions and take action without the leader. Leader Participative Behavior, as described by House and Dessler (1974:43), is the same as the consultative decision-making style.

These arguments suggest that Leader Participative Behavior is best regarded as consultative behavior indicative of concern for subordinates. Considerate and consultative leader behavior both reflect concern for the feelings of subordinates and concern with general human relations between the leader and his subordinates. Support for this view was found in the failure of school system personnel to distinguish between considerate (or supportive) and consultative leader behavior. Furthermore, findings in this study related to Leader Participative Behavior are consistent with Path-Goal Theory predictions with respect to considerate or supportive leader behavior, as indicated in a later part of this chapter. Participative leader behavior characterized by the human resources or by group and delegated decision-making styles was not examined in this study.

Although care must be exercised in interpreting the meaning of these findings for personnel in other school systems, identification of consultative leader behavior with supportive or considerate behavior may be characteristic of central offices of systems of education other than the one studied. The nature of the business conducted in a central office may require group or delegated decision-making styles. In this sense, participative leadership may be more appropriately regarded by school system personnel as behavior reflected in the adoption of one or other of these styles, rather than a consultative decision-making style.

Work-Oriented Leader Behavior

Factor analysis of the responses of school system personnel resulted in the emergence of two kinds of leader behavior, both of which may be categorized as work-oriented leader behaviors, as described by Stogdill (1974:418). Leader behavior items which loaded highest on the Leader

Directive Behavior factor were derived from the LBDQ-XII Initiating Structure Scale. Leader behavior items loading highest on the Leader Achievement-Oriented Behavior factor comprised items mostly from the LBDQ-XII Initiating Structure Scale but also from the LBDQ-XII Consideration Scale. No other studies of partial tests of the Path-Goal Theory of Leadership indicate a similar discrimination among leader behavior items descriptive of work-oriented leader behavior. For this reason comparisons between the findings in this study and other studies are difficult to make.

Schriesheim et al. (1976:297-321) discussed several issues relating to Leader Initiating Structure which provide possible explanations for school system personnel discriminating among work-oriented leader behaviors. An important difference between Leader Directive Behavior and Leader Achievement-Oriented Behavior concerns the explicitness of the behavior. Directive leader behaviors such as scheduling the work to be done, deciding what shall be done and how it shall be done and asking that group members follow standard rules and regulations are very explicit. In contrast, maintaining standards of performance, letting group members know what is expected, and helping subordinates overcome problems preventing task performance are more descriptive of implicit leader behaviors. Administrative and professional personnel, and to a lesser extent, clerical personnel seem to have made this distinction. For example, clerical personnel expressed general dissatisfaction with leader directiveness but substantial satisfaction with leader behavior oriented towards achievement. To the extent that personnel in other school systems are like those in the system studied, implicit leader behavior may be more satisfying to subordinates in central offices than explicit leader behavior.

Differences in the discriminating powers of school system personnel when compared to business and industrial personnel may also be reflected in differences in discretionary behavior. In some environments a leader may have no discretion over what shall be done and how it shall be done or in the scheduling of work. However, in a school system, leaders seem to have considerable discretion in these matters. Differences in discretionary behavior may also be associated with different interpretations of leader behavior items across several organizations. Such differences could result in different factor solutions of leader behavior item responses in various organizations, especially if oblique factor solutions are adopted.

Leader Behavior and Path-Goal Theory Propositions

With respect to environmental conditions, an essential feature of the Path-Goal Theory is that leader behavior complements the environment of subordinates by providing the coaching, guidance, support and rewards necessary for satisfaction and performance. Task characteristics and role perceptions are important parts of the environment of subordinates. The findings in this study are supportive of this complementary view of a leader's behavior.

Hypotheses about the relationship between Leader Participative Behavior and the satisfaction of subordinates were developed on the basis of participative leadership being a nondirective form of path-goal clarifying behavior. However, discussion of the findings in Chapter IX led to the conclusion that Path-Goal Theory propositions were not generally supported. Relationships between Leader Participative Behavior and Intrinsic Satisfaction found in the school system were opposite to those predicted.

Further examination of the Leader Participative Behavior factor in this chapter indicated that the factor is more appropriately described as being concerned with human relations between the leader and his subordinates, that is, school system personnel found consultative and supportive behavior to be similar. In this sense, the view of participative leadership as a nondirective form of role-clarifying behavior, as described by House and Dessler (1974:42), was not supported by school system data. Rather, Leader Participative Behavior seemed to be more appropriately regarded as being similar to the Consideration dimension of the LBDQ-XII instrument. The relationships between Leader Participative Behavior and Intrinsic Satisfaction among school system personnel are consistent with Path-Goal Theory propositions if Leader Participative Behavior is regarded as similar to considerate or supportive leadership, as argued. For example, an appropriate Path-Goal Theory prediction, as stated by House and Dessler (1974:41), is that supportive leadership is more positively related to satisfaction for subordinates engaged in structured tasks than for those performing unstructured tasks.

In this study, Leader Participative Behavior was found to be positively and substantially correlated with the Intrinsic Satisfaction of clerical and, to a lesser extent, administrative personnel, but not with the Intrinsic Satisfaction of professional personnel. Similarly, Leader Participative Behavior was positively and substantially correlated with the Intrinsic Satisfaction of personnel engaged in structured, repetitive tasks, but not with the Intrinsic Satisfaction of personnel engaged in varied, unstructured tasks. These findings suggest that when tasks are complex and varied, the challenge of the task is likely to be more intrinsically satisfying, and consultative or supportive leader behavior is likely to be less relevant to subordinates. However, Leader Participative Behavior is likely to be viewed as a source of task-mediated satisfaction for subordinates engaged in repetitive and structured tasks. These findings demonstrate support for Path-Goal Theory propositions if Leader Participative Behavior is regarded as similar to the

Consideration dimension of leader behavior.

Hypotheses regarding the relationships between Leader Directive Behavior and types of satisfaction were also put forward. Discussion of the findings relating to these hypotheses in Chapter VIII led to the conclusion that they are supportive of Path-Goal Theory propositions. School system personnel engaged in repetitive tasks expressed dissatisfaction on all satisfaction dimensions with Leader Directive Behavior. In addition, personnel with the least autonomy in performing their own tasks expressed dissatisfaction with Leader Directive Behavior. These findings are consistent with Path-Goal Theory predictions that subordinates engaged in simple repetitive tasks regard further clarification of work goals, and paths to those goals, as redundant. Leader Directive Behavior in these circumstances is viewed as unnecessarily close supervision.

No hypotheses were developed to investigate the other work-oriented leader behavior factor which emerged from factor analysis of the responses of school system personnel, namely, Leader Achievement-Oriented Behavior. However, in Chapter X several specific but tentative hypotheses relating to Leader Achievement-Oriented Behavior were formulated for subsequent investigation. These specific hypotheses may be stated in the form of a general hypothesis as follows:

A higher positive correlation between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction occurs in high Role Ambiguity, Role Conflict and Task Autonomy personnel groups than in low Role Ambiguity, Role Conflict and Task Autonomy personnel groups.

This hypothesis reflects the view that Leader Achievement-Oriented Behavior does clarify goals and paths to achieve them. The findings in this study were supportive of this view. According to Path-Goal Theory, Leader Achievement-Oriented Behavior would be more satisfying to those personnel with the freedom to make their own decisions concerning task performance than to others with less autonomy because such behavior directs subordinates towards the attainment of organizational goals and is sufficiently constraining to ensure that effort leads to the rewards needed for satisfaction.

General assessment of the relationships found between types of satisfaction of subordinates and the three leader behaviors, Participative, Directive and Achievement-Oriented Behavior leads to the conclusion that the findings are supportive of the Path-Goal Theory propositions. The Path-Goal Theory of Leadership applied to school system personnel.

THE PROMISE OF PATH-GOAL THEORY

According to House and Mitchell (1974:82), one of the promising features of theorizing about leadership in terms of subordinates' paths and goals is that the situational factors on which the effects of leader behavior are contingent are suggested with some precision. This precision is reflected in the most important conclusion to be drawn about the findings in this study of school system personnel. The several relationships between leader behaviors and types of satisfaction were associated with various task characteristics and role perceptions in different ways. Variation in Task Repetitiveness was most important in accounting for differences in relationships between Leader Directive Behavior and all types of satisfaction. Differences among school system personnel with respect to relationships between Leader Participative Behavior and Intrinsic Satisfaction were accounted for by variation in Task Repetitiveness, Task Structure and Role Conflict. Furthermore, variation in Role Ambiguity, Role Conflict and Task Autonomy accounted for substantial differences in the Extrinsic Satisfaction of subordinates with Leader Achievement-Oriented Behavior.

The major promise of the Path-Goal Theory identified by Barrow (1977:235) is that the emphasis on moderator variables influencing leader/subordinate relationships has created a much needed new research direction. This research approach led to other important conclusions about the findings in this study of school system personnel.

No direct substantial relationships were found between leader behaviors and various task characteristics. In addition, few direct substantial relationships were found between task characteristics and types of satisfaction. However, Task Repetitiveness, Structure and Autonomy were indirectly associated with leader behaviors and types of satisfaction through substantial differences among personnel with respect to relationships between leader behaviors and subordinates' satisfaction. The association of task characteristics with moderation of the relationships between leader behavior and satisfaction seemed to be reflected in their technological nature. In contrast, substantial relationships were found between leader behaviors and role perceptions, as well as types of satisfaction. Furthermore, Role Conflict and Ambiguity were found to be associated with moderation of the relationships between leader behavior and types of satisfaction. The complex nature of the interaction indicated by these findings seemed to be reflected in the social nature of the role factors.

These findings supported the assertion made by Barrow (1977:235) about the promise of the Path-Goal Theory of Leadership. Role perceptions and task characteristics were associated with moderation of relationships between leader behavior and the satisfaction of subordinates in different ways. However, the point is that the "moderator-variable" approach to role perceptions and task characteristics, as described by Barrow, led to research findings that help to interpret relationships between leader behaviors and the satisfaction of subordinates in a school system.

IMPLICATIONS FOR PRACTICE

Two of the most striking findings in the study were the positive and substantial relationships found between Leader Participative Behavior and Extrinsic Satisfaction, and between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction. Although generalization beyond school system personnel in this study is not warranted, these findings imply that subordinates are satisfied with leaders and with the job context in a work environment in which leader behavior is characterized by consultation and consideration together with letting subordinates know what is expected of them. In contrast, the finding that subordinates in the school system engaged in simple repetitive tasks expressed general dissatisfaction with Leader Directive Behavior seems to imply that explicit leader behavior such as frequently telling personnel how tasks shall be done and scheduling work is unnecessarily close supervision.

One interesting finding in this study was that professional personnel and personnel engaged in varied, unstructured tasks did not find leader behavior characterized by consultation and supportiveness to be intrinsically satisfying. Perhaps leaders should be aware that subordinates may find consultative and socially supportive practices irrelevant to them when tasks are sufficiently challenging and varied. Such leader behavior may also be viewed as diverting the subordinate from effectively working on his own tasks.

A further implication relates to the finding that subordinates who had the most freedom to make decisions expressed highest satisfaction with leader behavior oriented towards achievement. This finding seems to imply that under these circumstances subordinates require general direction towards organizational goals and assurance that effort leads to rewards which are satisfying. Alternatively, just assurance that subordinates' activities are leading in the direction of an organization's goals may be satisfying.

Complex interactions between leader behavior, perceptions of role, and subordinate satisfaction were found in this study. These findings suggest that in organizations where goals are not, or cannot be, precisely stated, and where personnel have several conflicting expectations relating to their work, leader behavior which reduces this conflict and ambiguity is satisfying. Leader consultative behavior and behavior oriented towards achievement seems to be role-clarifying and satisfying behavior.

Caution must be exercised in making generalizations from findings about relationships between leader behavior and subordinates' satisfaction among personnel in one school system. Nevertheless, the overall implication for administrators is that assessment of environmental conditions leads to different requirements for specific kinds and frequencies of leader behavior to make subordinates feel satisfied in their organization.

IMPLICATIONS FOR RESEARCH

Recommendations for further research are derived from two sources. One source is the findings in this study with respect to the Path-Goal Theory and the other source relates to the summary statement of Path-Goal relationships presented in Figure 1 on page 44.

In this study support was found for the position stated by Schriesheim and Von Glinow (1977:403) that even though the leader behavior scales used by House and Dessler (1974:46-47) appear to be the best to use, these scales require refinement. Several reviews have pointed out the shortcomings of leader behavior scales. For example, Schriesheim and Kerr (1974:756-765) state that all scales in varying degrees measure extraneous leader behavior dimensions such as punitive, arbitrary leader behavior, and production-oriented behavior. In addition, the supportive or considerate leader behavior dimension contains participative leader behavior items. Furthermore, Schriesheim and Stogdill (1975:202) pointed out that the LBDQ-XII instrument has a complex factor structure even though the factor structure is less complex than other leader behavior instruments. In this study, the emergence of two work-oriented leader behavior factors and the failure of respondents to discriminate between supportive and consultative (participative) leader behaviors support the arguments advanced in these reviews.

Tests of the Path-Goal Theory of Leadership require delineation of specific leader behavior. Differing leader behavior scales used in several tests of the theory make comparison of findings difficult if not impossible and tend to confound specific relationships between leader behavior and subordinates' satisfaction. The differing findings with respect to Leader Directive Behavior and Leader Achievement-Oriented Behavior, though both the scales comprised Initiating Structure items, illustrates this point.

With respect to Leader Achievement-Oriented Behavior, the correlations with Extrinsic Satisfaction were as substantial as the correlations between Leader Participative Behavior and Extrinsic Satisfaction. This finding is different from all other studies of the Path-Goal Theory reviewed. Characteristically, the correlations between Initiating Structure and facets of satisfaction are substantially lower than comparable correlations between Consideration and satisfaction. This feature of the study of school system personnel requires further investigation.

Several studies have investigated Role Ambiguity but not Role Conflict as a contingency factor in Path-Goal Theory relationships. This practice followed the finding of House and Rizzo (1972:501) that Role Ambiguity was the more important factor in a model of organizational behavior. However, Schuler et al. (1977:125) suggested that both Role Ambiguity and Role Conflict are equally important (see Chapter III). In this study Role Conflict was found to be more important as a contingency factor in relationships between leader behavior and the satisfaction of subordinates. None of the other studies reviewed arrived at this conclusion, and therefore further investigation of Role Conflict as a contingency factor in Path-Goal Theory relationships seems to be justified.

Many different measures of task characteristics have been investigated as contingency factors in tests of the Path-Goal Theory. In this study a revised instrument used in one of these studies was selected (see Chapter IV). However, comparison of the findings in this study with those of other studies is difficult to make because measures of task characteristics have been differently defined. For example, the task structure scale used by House and Dessler (1974:44-45) comprises items which measure both task structure and task repetitiveness or variety. In contrast, the Task Description Questionnaire used by Stinson and Johnson (1975a:245) comprised items on three separate factor analytically derived scales, namely, Task Structure, Task Repetitiveness and Task Autonomy.

Task Structure is most frequently hypothesized as the task dimension moderating relationships between leader behavior and subordinates' attitudes and behavior, but several studies which have attempted to delineate core dimensions of task characteristics have not proposed task structure as one of them (see Chapter III). Furthermore, findings in this study suggest that there is little difference between associations of Task Structure and Task Repetitiveness with moderation of the relationships between leader behavior and subordinates' satisfaction. For these reasons investigators undertaking further research may be better advised to investigate the moderating effects of task dimensions generally agreed to be core dimensions, namely, task variety, task autonomy, task identity and task feedback (Pierce and Dunham, 1976:92).

The findings relating to the association of Task Autonomy with moderation of the relationships between leader behavior and subordinates' satisfaction seem to require further investigation. Stinson and Johnson (1975a:247-248) found little evidence that Task Autonomy moderated these relationships but in this study of school personnel, Task Autonomy was found to be associated with moderation of the relationships between Leader Achievement-Oriented Behavior and Extrinsic Satisfaction. Further investigation may clarify the nature of Task Autonomy as a contingency factor in the Path-Goal Theory of Leadership.

Additional recommendations for further research may be derived from considering the delimitations on this study. Further research is required to investigate subordinate characteristics as contingency factors in relationships between leader behavior and subordinates' attitudes and behavior among school system personnel. The relationships between subordinate expectancies that effort leads to effective performance and leader behavior is another area of research not investigated in this study.

Finally, none of the several studies of the Path-Goal Theory has investigated two factors considered by House and Mitchell (1974:84) as important environmental contingency factors. These factors are the primary work group and the formal authority system of the organization. These areas of research could prove to be fruitful in advancing the development of the Path-Goal Theory of Leadership.

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APPENDIX A

A SET OF QUESTIONNAIRES

A SET OF QUESTIONNAIRES

The following set of questionnaires is designed to test certain statements about leader behavior derived from the Path-Goal Theory of Leadership. The set contains Leader Behavior, Task Description, Role Description and Satisfaction questionnaires.

There are separate instructions for the completion of each questionnaire.

YOUR RESPONSES ARE STRICTLY CONFIDENTIAL.

Do not put your name on the questionnaires.

This set of questionnaires requires approximately twenty minutes to complete.

PERSONNEL DATA

	for office use CC
Please complete the following:	1-3
Title of your position, e.g. Director, Administrative Clerk, Reading Specialist etc.	
--	4

THE LEADER BEHAVIOR QUESTIONNAIRE

On the following two pages is a list of items that may be used to DESCRIBE THE BEHAVIOR OF YOUR SUPERVISOR. Each item describes a specific kind of behavior, but DOES NOT ASK YOU TO JUDGE whether the behavior is desirable or undesirable. Remember that the items simply ask you to describe, AS ACCURATELY AS YOU CAN, the behavior of your supervisor.

Read each item carefully and decide how FREQUENTLY YOUR SUPERVISOR engages in the behavior described.

CIRCLE the number following the item which shows the answer you have selected on the scale:

Never	1
Seldom	2
Occasionally	3
Often	4
Always	5

Answer EVERY ITEM.

Where appropriate, for "He" read "She".

Note: (1) The term "group", refers to a department, division, or other unit of organization which is supervised by the person being described.

(2) The terms "members" or "subordinates", refer to all the people in the unit of organization which is supervised by the person being described.

(3) The term "supervisor", refers to the person in charge of the unit of organization of which you are a member.

	Never	Seldom	Occasionally	Often	Always	for office use CC
1. He explains the way my tasks should be carried out.	1	2	3	4	5	10
2. He keeps to himself.	1	2	3	4	5	11
3. He lets group members know what is expected of them.	1	2	3	4	5	12
4. He is friendly and approachable.	1	2	3	4	5	13
5. He helps me overcome problems which stop me carrying out my task.	1	2	3	4	5	14
6. Before making decisions he gives serious consideration to what his subordinates have to say.	1	2	3	4	5	15
7. He looks out for the personal welfare of group members.	1	2	3	4	5	16
8. He helps make working on my tasks more pleasant.	1	2	3	4	5	17
9. He puts suggestions made by the group into operation.	1	2	3	4	5	18
10. He schedules the work to be done.	1	2	3	4	5	19
11. He maintains definite standards of performance.	1	2	3	4	5	20

	Never	Seldom	Occasionally	Often	Always	for office use CC
12. Before taking action, he consults with his subordinates.	1	2	3	4	5	21
13. He makes sure his part in the group is understood.	1	2	3	4	5	22
14. He decides what shall be done and how it shall be done.	1	2	3	4	5	23
15. He does little things to make it pleasant to be a member of the group.	1	2	3	4	5	24
16. He gives advance notice of changes.	1	2	3	4	5	25
17. When faced with a problem he consults with subordinates.	1	2	3	4	5	26
18. He asks that group members follow standard rules and regulations.	1	2	3	4	5	27
19. He asks subordinates for their suggestions concerning how to carry out assignments.	1	2	3	4	5	28
20. He treats all group members as his equals.	1	2	3	4	5	29
21. He asks subordinates for suggestions on what assignments should be made.	1	2	3	4	5	30
22. He is willing to make changes.	1	2	3	4	5	31

THE TASK DESCRIPTION QUESTIONNAIRE

In the following questions, you are asked to describe the general characteristics of the job on which you work. PLEASE DO NOT USE THESE QUESTIONS TO SHOW HOW MUCH YOU LIKE OR DISLIKE YOUR JOB; just try to be as accurate and factually correct as possible.

CIRCLE the number next to the answer that best describes YOUR JOB.

Answer EVERY ITEM.

for
office
use
CC

1. How much can you control how fast or how slow you work? 32

   1. very little
   2. a little bit
   3. some
   4. quite a bit
   5. very much

2. How often are working days on your job just like every other working day? 33

   1. almost never
   2. seldom
   3. sometimes
   4. often
   5. almost always

3. How much of your work is structured for you? 34

   1. very little
   2. a little bit
   3. some
   4. quite a bit
   5. very much

4. How much do you plan the work you need to do on your job without help from your supervisor? 35

   1. very little
   2. a little bit
   3. some
   4. quite a bit
   5. very much

5. How much does your job require you to use a specific set of steps? 36

   1. very little
   2. a little bit
   3. some
   4. quite a bit
   5. very much

for office use
CC

6. If something out of the ordinary happens on your job, how often do you make the decision in what to do about it? 37

1. almost never
2. seldom
3. sometimes
4. often
5. almost always

7. How similar are the tasks you perform in a typical work day? 38

1. almost all different
2. mostly different
3. half the same
4. mostly the same
5. almost all the same

8. How much does your job require you to work at the same pace all day? 39

1. very little
2. a little bit
3. some
4. quite a bit
5. very much

9. How often is there a specific way your job has to be done? 40

1. almost never
2. seldom
3. sometimes
4. often
5. almost always

10. How often do you make a decision about your job without the advice of your supervisor? 41

1. almost never
2. seldom
3. sometimes
4. often
5. almost always

for office use

CC

11. How much is your job controlled by rules and regulations? 42

1. very little
2. a little bit
3. some
4. quite a bit
5. very much

12. How often does your job require you to do the same thing, over and over all day? 43

1. almost never
2. seldom
3. sometimes
4. often
5. almost always

13. How much is your work scheduled for you? 44

1. very little
2. a little bit
3. some
4. quite a bit
5. very much

14. How often do you find that you do your job differently from how someone else might do it? 45

1. almost never
2. seldom
3. sometimes
4. often
5. almost always

15. How much does your job require you to do routine tasks? 46

1. very little
2. a little bit
3. some
4. quite a bit
5. very much

THE ROLE PERCEPTION QUESTIONNAIRE

The following statements describe various organizational conditions that MAY or MAY NOT exist in the Edmonton Public School System. You are asked to indicate THE DEGREE TO WHICH THE CONDITION EXISTS FOR YOU.

Read each of the statements carefully. Rate HOW ACCURATE, that is, HOW TRUE each statement is NOW on the following scale.

VERY FALSE 1 2 3 4 5 6 7 VERY TRUE

- if the statement is VERY TRUE then circle 7
- if the statement is VERY FALSE then circle 1
- if the accuracy of the statement lies SOMEWHERE BETWEEN VERY FALSE and VERY TRUE then circle the appropriate number.

Please rate EVERY statement.

	VERY FALSE VERY TRUE	for office use CC
1. I feel certain about how much authority I have.	1 2 3 4 5 6 7	47
2. I have to do things that should be done differently.	1 2 3 4 5 6 7	48
3. There are clear, planned goals and objectives for my job.	1 2 3 4 5 6 7	49
4. I receive an assignment without the manpower to complete it.	1 2 3 4 5 6 7	50
5. I know that I have divided my time properly.	1 2 3 4 5 6 7	51
6. I have to buck a rule or policy in order to carry out an assignment.	1 2 3 4 5 6 7	52
7. I work with two or more groups who operate quite differently.	1 2 3 4 5 6 7	53
8. I know what my responsibilities are.	1 2 3 4 5 6 7	54
9. I receive incompatible requests from two or more people.	1 2 3 4 5 6 7	55
10. I know what is expected of me.	1 2 3 4 5 6 7	56
11. I do things that are apt to be accepted by one person and not accepted by others.	1 2 3 4 5 6 7	57
12. I receive an assignment without adequate resources and materials to execute it.	1 2 3 4 5 6 7	58
13. There is clear explanation of what has to be done.	1 2 3 4 5 6 7	59
14. I work on unnecessary things.	1 2 3 4 5 6 7	60

THE MINNESOTA SATISFACTION QUESTIONNAIRE

The purpose of this questionnaire is to give you a chance to tell HOW YOU FEEL ABOUT YOUR PRESENT JOB, what things you are SATISFIED with and what things you are NOT SATISFIED with.

Read the statements on the following page carefully. Decide HOW SATISFIED YOU FEEL ABOUT THE ASPECT OF YOUR JOB described by the statement.
Keeping the statement in mind:

- if you feel that your job gives you MORE THAN YOU EXPECTED, circle 5 under the column VERY SATISFIED.
- if you feel that your job gives you WHAT YOU EXPECTED, circle 4 under the column SATISFIED
- if you CANNOT MAKE UP YOUR MIND whether the job gives you what you expected, circle 3 under the column NEITHER
- if you feel that your job gives you LESS THAN YOU EXPECTED, circle 2 under the column DISSATISFIED
- if you feel that your job gives you MUCH LESS THAN YOU EXPECTED, circle 1 under the column VERY DISSATISFIED.

Please answer EVERY item.

On my present job, this is how I feel about:	Very Dissatisfied	Dissatisfied	Neither (Undecided)	Satisfied	Very Satisfied	for office use CC
1. Being able to keep busy all the time.	1	2	3	4	5	61
2. The chance to work alone on the job.	1	2	3	4	5	62
3. The chance to do different things from time to time.	1	2	3	4	5	63
4. The chance to be "somebody" in the community.	1	2	3	4	5	64
5. The way my boss handles his employees.	1	2	3	4	5	65
6. The competence of my supervisor in making decisions.	1	2	3	4	5	66
7. Being able to do things that don't go against my conscience.	1	2	3	4	5	67
8. The way my job provides for steady employment.	1	2	3	4	5	68
9. The chance to do things for other people.	1	2	3	4	5	69
10. The chance to tell other people what to do.	1	2	3	4	5	70

On my present job, this is how I feel about:

	Very Dissatisfied	Dissatisfied	Neither (Undecided)	Satisfied	Very Satisfied	for office use CC
11. The chance to do something that makes use of my abilities.	1	2	3	4	5	71
12. The way Board policies are put into practice.	1	2	3	4	5	72
13. My pay and the amount of work I do.	1	2	3	4	5	73
14. The chances for advancement on this job.	1	2	3	4	5	74
15. The freedom to use my own judgment.	1	2	3	4	5	75
16. The chance to try my own methods of doing the job.	1	2	3	4	5	76
17. The working conditions.	1	2	3	4	5	77
18. The way my co-workers get along with each other.	1	2	3	4	5	78
19. The praise I get for doing a good job.	1	2	3	4	5	79
20. The feeling of accomplishment I get from the job.	1	2	3	4	5	80

APPENDIX B

CLASSIFICATION OF SUPPORT PERSONNEL USED IN AN URBAN CANADIAN SCHOOL SYSTEM

CLASSIFICATION OF SUPPORT PERSONNEL USED IN AN URBAN CANADIAN SCHOOL SYSTEM

Grade	Class Name
3	CAFETERIA AIDE
5	ACCOUNT CLERK I
5	CLERK I
5	COOK I
6	AUDIO-VISUAL AIDE
6	CLERK TYPIST I
6	LABORATORY ASSISTANT
6	LIBRARY AIDE
6	LAUNDRY SERVICES TECHNICIAN
6	PAYROLL CLERK I
6	TEACHER AIDE
6	HORTICULTURAL AIDE
7	BEAUTY CULTURE TECHNICIAN
7	COOK II
7	SCHOOL SECRETARY I
7	SWITCHBOARD OPERATOR
8	ACCOUNT CLERK II
8	CLERK II
8	CLERK TYPIST II
8	DUPLICATING EQUIPMENT OPERATOR I
8	KITCHEN PORTER
8	LIBRARY TECHNICIAN
8	SCHOOL SECRETARY II
8	SECRETARY I
9	DUPLICATING EQUIPMENT OPERATOR II
9	KEYPUNCH OPERATOR I
9	PAYROLL CLERK II
9	SECRETARY II
10	ACCOUNT CLERK III
10	ATHLETIC FACILITIES CLERK
10	AUTOMOTIVE AIDE
10	DATA PROCESSING LIBRARIAN
10	SHIPPER/RECEIVER
10	SUBSTITUTE SERVICE CLERK
11	SCHOOL SECRETARY III
12	ACCOUNT CLERK IV
12	CLERK III
12	SECRETARY III
13	COOK III
13	KEYPUNCH OPERATOR II
13	PAYROLL CLERK III
13	STOCKKEEPER I
14	CLERK IV
14	KEYPUNCH SUPERVISOR
14	SCHOOL SECRETARY IV
15	HORTICULTURAL TECHNICIAN
15	STOCKKEEPER II
16	CLERK V
18	CHEF

APPENDIX C

PERCENTAGE FREQUENCIES OF RESPONSES TO QUESTIONNAIRE ITEMS

TABLE 42

PERCENTAGE FREQUENCIES OF RESPONSES TO LEADER BEHAVIOR QUESTIONNAIRE ITEMS: CLERICAL OCCUPATIONAL LEVEL (n=66)

Item Number	Response Code				
	1	2	3	4	5
1	9.1	7.6	22.7	30.3	30.3
2	7.6	22.7	39.4	27.3	3.0
3	6.1	16.7	22.7	31.8	22.7
4	1.5	12.1	18.2	25.8	42.4
5	6.1	12.1	24.2	27.3	30.3
6	4.5	22.7	18.2	33.3	21.2
7	4.5	16.7	30.3	25.8	22.7
8	9.1	16.7	25.8	19.7	28.8
9	3.0	21.2	36.4	28.8	10.6
10	10.6	16.7	25.8	21.2	25.8
11	6.1	7.6	22.7	28.8	34.8
12	4.5	21.2	27.3	30.3	16.7
13	4.5	10.6	18.2	37.9	28.8
14	6.1	3.0	21.2	33.3	36.4
15	7.6	19.7	30.3	22.7	19.7
16	10.6	25.8	21.2	18.2	24.2
17	4.5	12.1	34.8	27.3	21.2
18	1.5	9.1	18.2	33.3	37.9
19	10.6	16.7	37.9	25.8	9.1
20	15.2	9.1	27.3	21.2	27.3
21	12.1	27.3	25.8	22.7	12.1
22	1.5	16.7	31.8	27.3	22.7

TABLE 43

PERCENTAGE FREQUENCIES OF RESPONSES TO LEADER BEHAVIOR QUESTIONNAIRE ITEMS: PROFESSIONAL OCCUPATIONAL LEVEL (n=36)

Item Number	Response Code				
	1	2	3	4	5
1	13.9	41.7	41.7	2.8	0.0
2	5.6	33.3	25.0	33.3	2.8
3	2.8	22.2	58.3	16.7	0.0
4	0.0	0.0	2.8	27.8	69.4
5	2.8	25.0	50.0	19.4	2.8
6	0.0	2.8	22.2	50.0	25.0
7	2.8	5.6	19.4	41.7	30.6
8	5.6	13.9	44.4	22.2	13.9
9	0.0	8.3	47.2	36.1	8.3
10	50.0	27.8	13.9	8.3	0.0
11	5.6	36.1	22.2	19.4	16.7
12	0.0	8.3	33.3	52.8	5.6
13	0.0	13.9	50.0	25.0	11.1
14	8.3	55.6	27.8	8.3	0.0
15	2.8	8.3	33.3	38.9	16.7
16	0.0	0.0	19.4	50.0	30.6
17	0.0	16.7	33.3	47.2	2.8
18	2.8	19.4	41.7	33.3	2.8
19	0.0	8.3	27.8	58.3	5.6
20	2.8	5.6	25.0	38.9	27.8
21	2.8	19.4	30.6	44.4	2.8
22	2.8	2.8	27.8	55.6	11.1

TABLE 44

PERCENTAGE FREQUENCIES OF RESPONSES TO LEADER BEHAVIOR QUESTIONNAIRE ITEMS: ADMINISTRATIVE OCCUPATIONAL LEVEL (n=47)

Item Number	Response Code 1	2	3	4	5
1	8.5	36.2	25.5	25.5	4.3
2	6.4	34.0	31.9	23.4	4.3
3	4.3	19.1	31.9	38.3	6.4
4	2.1	10.6	8.5	36.2	42.6
5	6.4	17.0	27.7	34.0	14.9
6	6.4	10.6	34.0	31.9	17.0
7	8.5	14.9	23.4	34.0	19.1
8	10.6	17.0	27.7	29.8	14.9
9	2.1	10.6	46.8	34.0	6.4
10	10.6	31.9	34.0	19.1	4.3
11	0.0	19.1	25.5	31.9	23.4
12	4.3	12.8	29.8	44.7	8.5
13	2.1	17.0	23.4	38.3	19.1
14	2.1	19.1	36.2	38.3	4.3
15	4.3	25.5	36.2	23.4	10.6
16	2.1	25.5	29.8	31.9	10.6
17	4.3	6.4	36.2	42.6	10.6
18	0.0	14.9	34.0	40.4	10.6
19	6.4	17.0	25.5	44.7	6.4
20	12.8	12.8	31.9	29.8	12.8
21	10.6	25.5	27.7	29.8	6.4
22	2.1	10.6	36.2	40.4	10.6

TABLE 45

PERCENTAGE FREQUENCIES OF RESPONSES TO TASK DESCRIPTION QUESTIONNAIRE ITEMS: CLERICAL OCCUPATIONAL LEVEL (n=66)

Item Number	Response Code				
	1	2	3	4	5
1	10.6	4.5	18.2	34.8	31.8
2	6.1	9.1	25.8	37.9	21.2
3	9.1	7.6	33.3	39.4	10.6
4	13.6	3.0	18.2	37.9	27.3
5	7.6	4.5	27.3	34.8	25.8
6	12.1	16.7	39.4	25.8	6.1
7	3.0	22.7	22.7	30.3	21.2
8	4.5	12.1	34.8	28.8	19.7
9	1.5	6.1	18.2	40.9	33.3
10	15.2	9.1	39.4	30.3	6.1
11	4.5	9.1	30.3	37.9	18.2
12	9.1	16.7	12.1	33.3	28.8
13	16.7	13.6	24.2	30.3	15.2
14	12.1	18.2	45.5	22.7	1.5
15	10.6	7.6	24.2	31.8	25.8

TABLE 46

PERCENTAGE FREQUENCIES OF RESPONSES TO TASK DESCRIPTION QUESTIONNAIRE ITEMS: PROFESSIONAL OCCUPATIONAL LEVEL (n=36)

Item Number	Response Code				
	1	2	3	4	5
1	2.8	2.8	19.4	41.7	33.3
2	5.6	33.3	44.4	16.7	0.0
3	58.3	13.9	27.8	0.0	0.0
4	2.8	0.0	0.0	16.7	80.6
5	2.8	22.2	27.8	38.9	8.3
6	0.0	0.0	11.1	44.4	44.4
7	2.8	30.6	47.2	19.4	0.0
8	13.9	22.2	27.8	30.6	5.6
9	13.9	36.1	25.0	22.2	2.8
10	0.0	0.0	8.3	44.4	47.2
11	11.1	22.2	55.6	11.1	0.0
12	33.3	25.0	33.3	8.3	0.0
13	61.1	13.9	16.7	5.6	2.8
14	0.0	38.9	50.0	8.3	0.0
15	11.1	30.6	50.0	8.3	0.0

TABLE 47

PERCENTAGE FREQUENCIES OF RESPONSES TO TASK DESCRIPTION QUESTIONNAIRE ITEMS: ADMINISTRATIVE OCCUPATIONAL LEVEL (n=47)

Item Number	Response Code				
	1	2	3	4	5
1	2.1	14.9	14.9	36.2	31.9
2	12.8	53.2	27.7	6.4	0.0
3	23.4	10.6	42.6	21.3	2.1
4	2.1	4.3	8.5	38.3	46.8
5	12.8	10.6	36.2	29.8	10.6
6	2.1	4.3	17.0	46.8	29.8
7	4.3	51.1	29.8	14.9	0.0
8	27.7	21.3	25.5	14.9	10.6
9	10.6	12.8	42.6	27.7	6.4
10	0.0	8.5	17.0	53.2	21.3
11	8.5	14.9	38.3	29.8	8.5
12	29.8	51.1	14.9	4.3	0.0
13	23.4	23.4	27.7	23.4	2.1
14	4.3	6.4	40.4	42.6	6.4
15	19.1	40.4	29.8	10.6	0.0

TABLE 48

PERCENTAGE FREQUENCIES OF RESPONSES TO ROLE PERCEPTION QUESTIONNAIRE ITEMS: CLERICAL OCCUPATIONAL LEVEL (n=66)

Item Number	Response Code						
	1	2	3	4	5	6	7
1	16.7	0.0	18.2	15.2	16.7	12.1	21.2
2	34.8	12.1	19.7	15.2	7.6	6.1	4.5
3	4.5	7.6	9.1	13.6	12.1	18.2	34.8
4	48.5	6.1	9.1	16.7	6.1	6.1	7.6
5	0.0	0.0	1.5	13.6	7.6	31.8	45.5
6	53.0	16.7	12.1	6.1	9.1	1.5	1.5
7	37.9	7.6	4.5	7.6	10.6	7.6	24.2
8	0.0	3.0	1.5	1.5	1.5	18.2	74.2
9	27.3	19.7	9.1	15.2	12.1	3.0	13.6
10	1.5	0.0	3.0	4.5	3.0	21.2	66.7
11	21.2	9.1	10.6	4.5	4.5	15.2	34.8
12	53.0	16.7	9.1	6.1	4.5	4.5	6.1
13	4.5	4.5	9.1	12.1	10.6	18.2	40.9
14	48.5	18.2	6.1	4.5	12.1	6.1	4.5

TABLE 49

PERCENTAGE FREQUENCIES OF RESPONSES TO ROLE PERCEPTION QUESTIONNAIRE ITEMS: PROFESSIONAL OCCUPATIONAL LEVEL (n=36)

Item Number	Response Code						
	1	2	3	4	5	6	7
1	0.0	2.8	5.6	16.7	30.6	36.1	8.3
2	5.6	36.1	16.7	13.9	8.3	5.6	13.9
3	8.3	13.9	25.0	11.1	13.9	19.4	8.3
4	8.3	13.9	8.3	22.2	13.9	2.8	30.6
5	8.3	25.0	30.6	25.0	2.8	5.6	2.8
6	22.2	38.9	8.3	19.4	8.3	0.0	2.8
7	8.3	13.9	5.6	11.1	11.1	30.6	19.4
8	0.0	2.8	5.6	8.3	5.6	38.9	38.9
9	11.1	16.7	8.3	5.6	27.8	19.4	11.1
10	2.8	0.0	5.6	13.9	13.9	47.2	16.7
11	2.8	11.1	11.1	30.6	22.2	11.1	11.1
12	8.3	22.2	13.9	16.7	19.4	16.7	2.8
13	8.3	16.7	11.1	27.8	13.9	22.2	0.0
14	30.6	44.4	8.3	2.8	8.3	5.6	0.0

TABLE 50

PERCENTAGE FREQUENCIES OF RESPONSES TO ROLE PERCEPTION QUESTIONNAIRE ITEMS: ADMINISTRATIVE OCCUPATIONAL LEVEL (n=47)

Item Number	Response Code						
	1	2	3	4	5	6	7
1	0.0	10.6	4.3	6.4	36.2	23.4	19.1
2	10.6	34.0	6.4	17.0	17.0	10.6	4.3
3	4.3	4.3	10.6	21.3	27.7	19.1	12.8
4	12.8	17.0	21.3	8.5	17.0	14.9	8.5
5	0.0	0.0	10.6	23.4	27.7	17.0	21.3
6	19.1	36.2	14.9	10.6	12.8	4.3	2.1
7	12.8	8.5	2.1	8.5	21.3	29.8	17.0
8	0.0	4.3	6.4	0.0	14.9	38.3	36.2
9	17.0	23.4	10.6	8.5	14.9	14.9	10.6
10	0.0	0.0	8.5	8.5	21.3	36.2	25.5
11	6.4	19.1	4.3	12.8	23.4	17.0	17.0
12	14.9	27.7	19.1	8.5	12.8	8.5	8.5
13	2.1	12.8	10.6	17.0	23.4	19.1	14.9
14	23.4	31.9	8.5	10.6	19.1	4.3	2.1

TABLE 51

PERCENTAGE FREQUENCIES OF RESPONSES TO MINNESOTA SATISFACTION QUESTIONNAIRE ITEMS: CLERICAL OCCUPATIONAL LEVEL (n=66)

Item Number	Response Code				
	1	2	3	4	5
1	3.0	9.1	4.5	40.9	42.4
2	3.0	6.1	6.1	37.9	47.0
3	10.6	12.1	9.1	43.9	24.2
4	7.6	7.6	37.9	33.3	13.6
5	12.1	15.2	21.2	21.2	30.3
6	4.5	13.6	19.7	28.8	33.3
7	0.0	3.0	6.1	47.0	43.9
8	1.5	0.0	6.1	34.8	57.6
9	1.5	9.1	21.2	37.9	30.3
10	4.5	4.5	48.5	33.3	9.1
11	6.1	19.7	12.1	42.4	19.7
12	4.5	25.8	39.4	25.8	4.5
13	15.2	22.7	13.6	40.9	7.6
14	13.6	42.4	21.2	16.7	6.1
15	6.1	16.7	15.2	39.4	22.7
16	7.6	16.7	15.2	43.9	16.7
17	9.1	12.1	10.6	40.9	27.3
18	6.1	21.2	9.1	25.8	37.9
19	9.1	10.6	27.3	34.8	18.2
20	6.1	9.1	16.7	42.4	25.8

TABLE 52

PERCENTAGE FREQUENCIES OF RESPONSES TO MINNESOTA SATISFACTION QUESTIONNAIRE ITEMS: PROFESSIONAL OCCUPATIONAL LEVEL (n=36)

Item Number	Response Code				
	1	2	3	4	5
1	0.0	0.0	2.8	44.4	52.8
2	0.0	2.8	8.3	52.8	36.1
3	0.0	0.0	8.3	36.1	55.6
4	0.0	0.0	47.2	41.7	11.1
5	8.3	11.1	22.2	41.7	16.7
6	5.6	27.8	13.9	33.3	19.4
7	0.0	5.6	5.6	63.9	25.0
8	0.0	0.0	2.8	36.1	61.1
9	0.0	2.8	2.8	50.0	44.4
10	0.0	0.0	61.1	33.3	5.6
11	0.0	11.1	5.6	55.6	27.8
12	11.1	38.9	36.1	13.9	0.0
13	2.8	5.6	5.6	63.9	22.2
14	8.3	16.7	50.0	25.0	0.0
15	0.0	0.0	0.0	36.1	63.9
16	0.0	0.0	2.8	36.1	61.1
17	0.0	8.3	19.4	58.3	13.9
18	0.0	2.8	5.6	61.1	30.6
19	0.0	5.6	33.3	50.0	11.1
20	0.0	8.3	16.7	55.6	19.4

TABLE 53

PERCENTAGE FREQUENCIES OF RESPONSES TO MINNESOTA SATISFACTION QUESTIONNAIRE ITEMS: ADMINISTRATIVE OCCUPATIONAL LEVEL (n=47)

Item Number	Response Code				
	1	2	3	4	5
1	2.1	0.0	8.5	48.9	40.4
2	0.0	6.4	8.5	66.0	19.1
3	0.0	2.1	10.6	36.2	51.1
4	0.0	2.1	31.9	46.8	19.1
5	4.3	17.0	25.5	38.3	14.9
6	8.5	6.4	21.3	36.2	27.7
7	4.3	8.5	6.4	53.2	27.7
8	0.0	0.0	19.1	44.7	36.2
9	0.0	2.1	6.4	46.8	44.7
10	0.0	2.1	34.0	44.7	19.1
11	0.0	10.6	6.4	55.3	27.7
12	0.0	17.0	31.9	40.4	10.6
13	2.1	6.4	14.9	61.7	14.9
14	0.0	6.4	36.2	51.1	6.4
15	0.0	12.8	6.4	36.2	44.7
16	0.0	4.3	14.9	36.2	44.7
17	2.1	10.6	10.6	55.3	21.3
18	0.0	6.4	8.5	53.2	31.9
19	6.4	8.5	25.5	44.7	14.9
20	2.1	6.4	8.5	63.8	19.1

APPENDIX D

FACTOR SOLUTIONS FOR RESPONSES TO THE LEADER BEHAVIOR QUESTIONNAIRE

TABLE 54

VARIMAX FACTOR SOLUTION OF SCHOOL SYSTEM PERSONNEL RESPONSES TO LEADER BEHAVIOR QUESTIONNAIRE ITEMS (N=149)

Item Number	Factor I	Factor II	Factor III	Communalities
1	.07	.66	.51	.70
2	-.46	-.49	.02	.45
3	.19	.69	.33	.62
4	.74	.34	-.08	.68
5	.42	.63	.28	.64
6	.78	.19	.10	.66
7	.67	.43	.02	.63
8	.69	.46	.15	.71
9	.70	.27	.07	.57
10	.07	.30	.79	.72
11	.23	.62	.46	.65
12	.81	-.06	.23	.72
13	.38	.54	.42	.60
14	-.11	.19	.78	.66
15	.63	.48	-.05	.64
16	.67	.42	-.03	.62
17	.75	.00	.39	.71
18	.06	.04	.75	.56
19	.84	.05	.00	.71
20	.71	.34	-.10	.63
21	.73	.17	.10	.57
22	.70	.30	.01	.57
% Total Variance	34.1	16.4	13.1	
% Common Variance	53.6	25.8	20.7	

Note: Factor loadings in boxes are greater than |.40|.

TABLE 55

OBLIQUE FACTOR SOLUTION OF LEADER BEHAVIOR ITEMS OBTAINED BY HOUSE AND DESSLER* (N=198)

Item Number	Factor I Instrumental Leadership	Factor II Supportive Leadership	Factor III Participative Leadership
1	$\boxed{.47}$	-.18	.06
2	-.15	-.35	.23
3	$\boxed{.46}$	-.35	-.05
4	-.10	$\boxed{-.76}$	.01
5	.23	$\boxed{-.46}$	.03
6	-.15	-.40	$\boxed{.62}$
7	.13	$\boxed{-.65}$	.08
8	.05	$\boxed{-.72}$	-.02
9	-.13	$\boxed{-.73}$	-.13
10	$\boxed{.65}$	.27	.10
11	$\boxed{.77}$	.08	.17
12	.01	.10	$\boxed{.72}$
13	$\boxed{.44}$	-.30	.05
14	$\boxed{.83}$	.23	-.07
15	-.03	$\boxed{-.97}$	-.23
16	-.06	$\boxed{-.66}$	.15
17	.11	.07	$\boxed{.77}$
18	$\boxed{.63}$	.00	-.01
19	.13	.04	$\boxed{.68}$
20	-.32	$\boxed{-.99}$	.04
21	-.01	.18	$\boxed{.55}$
22	.07	$\boxed{-.47}$	.23

Note: Factor loadings in boxes are greater than $|.40|$.

*Adapted from House and Dessler (1974:46-47).

TABLE 56

OBLIQUE FACTOR SOLUTION OF SCHOOL SYSTEM PERSONNEL RESPONSES TO LEADER BEHAVIOR ITEMS MATCHED TO THE HOUSE AND DESSLER SOLUTION (TABLE 55) (N=149)

Item Number	Factor I Instrumental Leadership	Factor II Supportive Leadership	Factor III Participative Leadership
1	$\boxed{.67}$	-.33	-.19
2	-.04	$\boxed{.51}$	.06
3	$\boxed{.49}$	$\boxed{-.46}$	-.21
4	-.12	$\boxed{-.45}$	.19
5	.37	$\boxed{-.47}$	-.05
6	-.01	-.25	.39
7	-.02	$\boxed{-.49}$	.11
8	.14	$\boxed{-.44}$	.17
9	-.01	-.31	.28
10	$\boxed{.81}$	.12	.17
11	$\boxed{.58}$	-.35	-.09
12	.01	.03	$\boxed{.63}$
13	$\boxed{.48}$	-.32	.04
14	$\boxed{.80}$	.23	.13
15	-.03	$\boxed{-.54}$	.04
16	-.04	$\boxed{-.48}$	.12
17	.19	.06	$\boxed{.62}$
18	$\boxed{.69}$	.32	.32
19	-.17	-.18	$\boxed{.48}$
20	-.13	$\boxed{-.46}$	.16
21	-.01	-.22	.37
22	-.05	-.36	.23

Note: ~~Factor~~ Loadings in boxes are greater than |.40|.